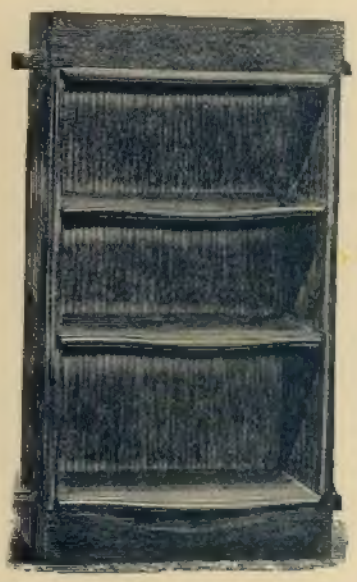
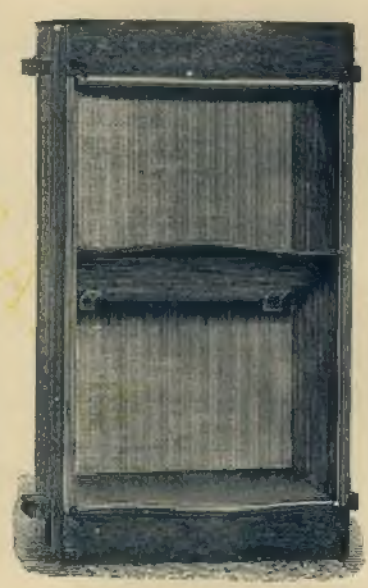
Dumb Waiter Fixtures.

SEE DESCRIPTION ON OPPOSITE PAGE.



Style of Waiter with Stationary Shelves for Private Residences.



Style of Waiter with Hinged Shelf for Flats and Restaurants.

ABOVE CUTS SHOW "CANNON'S" PATENT DUMB WAITERS

FOR

Dwelling House, Restaurant, Hotel and Light Factory Use.

WAITERS CAN BE MADE TO FIT ANY SIZED OPENING.

Weights Required for these Fixtures.

For light work, a weight ten pounds heavier than the box is sufficient. For use in Flats, or where required to run more than one Story, the weight should be fifteen to twenty pounds heavier than the box.

Weight and Rope Furnished by us if Desired.

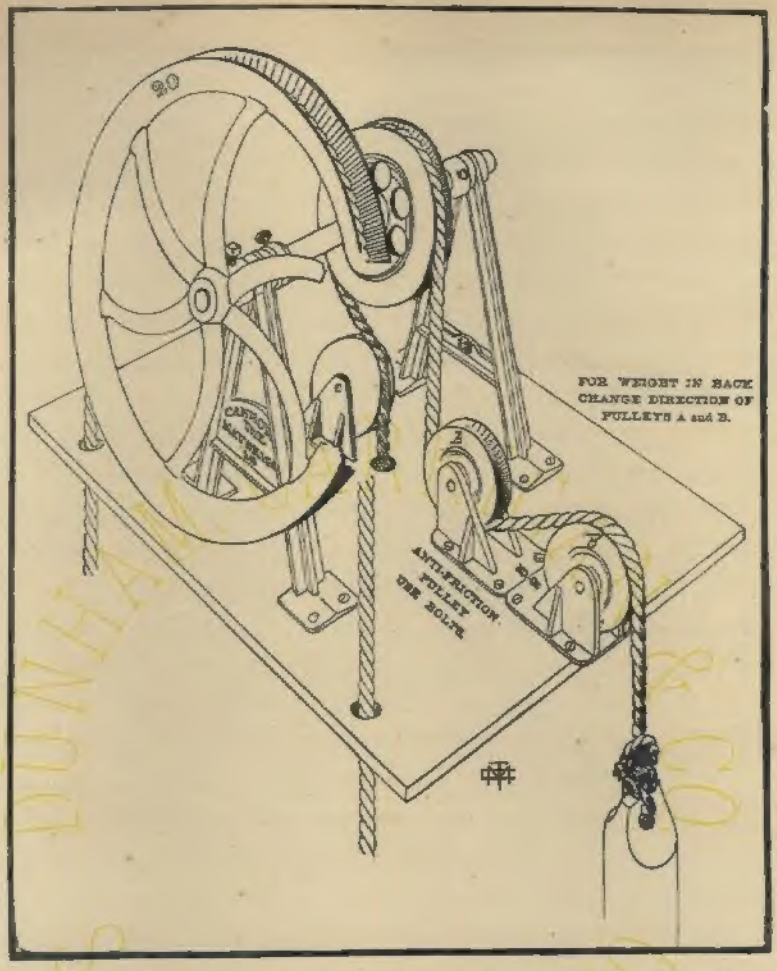
PRICES AND SIZES OF FIXTURES.

			Single Face.	Double Face.
For Openings,	19 to 22	Inches Wide, use a 16 Inch. Prices for Fixtures only	$25 00	$30 00
" "	23 to 27	" " " 30 " " " " "	27 50	35 00
" "	28 to 32	" " " 24 " " " " "	30 00	38 00
" "	34 to 38	" " " 30 " " " " "	35 00	42 00

In ordering Double-Face Fixtures, give Dimension of Well Hole, in order to obtain proper length of Shaft.

Double-Face Fixtures to order only. Not kept in Stock.

Description of "Cannon's" Dumb Waiter Fixtures.



Directions for Putting up "Cannon's" Patent Dumb Waiter Fixtures.

Use 1¼ inch board for shelf, on which securely fasten the fixture as shown in cut, also use 1¼ inch board for bottom shelf, on which the Waiter rests, when it is down.

See that fixtures set perfectly plumb and level on top shelf.

For light work use ⅜ manilla rope; for heavy work use ½ manilla rope, both on the hoist wheel and for attaching weight to Waiter.

For private residences we can furnish a fine drab braided cotton rope, which, fastened with steel couplings, is preferable for handling to the manilla rope in general use.

In this cut the two Friction Rollers, **A** and **B**, are shown as being close together; this may not necessarily be, as **A** should always be so placed as to catch the rope, plumb, from the small shaft wheel, and **B** must be on edge of shelf to carry the weight clear of the Waiter side.

By changing these rollers, the weight can be coursed in any direction desired, either on side, back or in the corner.

In this age of improvements, many articles for the convenience of the householder have been invented and introduced into new buildings, and also in the remodeling of old ones.

Although Dumb Waiters have been in use for many years, there seem to have been until recently but few, if any improvements made over the old styles.

Even the most common articles of household use have undergone far more improvements than the Dumb Waiter.

People seemed to consider that a box, a rope and a weight were all that was necessary to give them the means of transporting their dishes and other articles to the different floors of their dwellings, notwithstanding this combination jarred, and often caused a disastrous smash of the load intrusted to its care.

In private residences where a Dumb Waiter is required, "CANNON'S" PATENT will be found to give entire satisfaction. For all ordinary purposes it does not require a clamp to hold it in position, as it will sustain a weight of from 35 to 50 pounds without running down. But where the Waiter is to be loaded in excess of that weight, the clamp must be used to insure perfect safety.

The working parts being of Iron and the shaft running on Babbit Metal, they are strong as well as noiseless.

Any good mechanic can build the Waiter, and by attending to the directions can apply the fixtures.

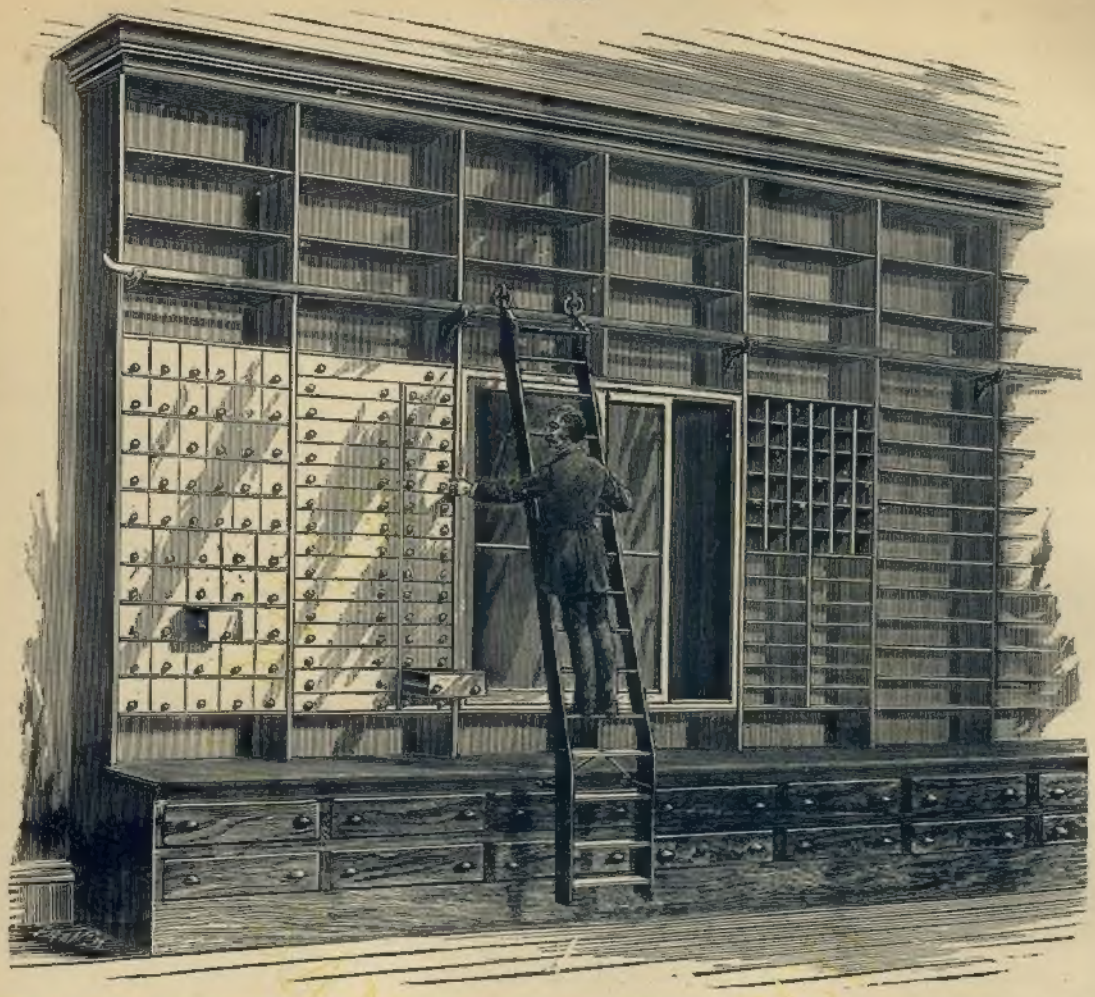
There are many cases where a Waiter is wanted to open in front on one floor, and in the back on another. This requires a double-faced fixture, which is our regular fixture, with a hoist wheel on each end of the shaft.

In splicing the hoisting-rope, care should be taken to have the sliding sheave, which goes under the bottom shelf, remain in the centre of guide rods; this will allow for the shrinkage or stretch of the rope. Waiters running more than two stories, the sliding sheave can be dispensed with.

For Illustrations and Prices, see opposite Page.

"Lockett's" Railroad Step Ladder.

PATENTED.



Reasons why every Store should use the "Lockett" Railroad Step Ladder:

1. The Ladder is always in its place.
2. It is never in the way.
3. It prevents scratching and marring the shelving and goods on shelves.
4. It is perfectly steady, and any one can use it with perfect safety—a heavy man as well as a light one.
5. You can reach goods on shelving near ceiling just as easily as those lower down.
6. A man can easily pull himself along while standing on the ladder, without being obliged to get down and place ladder twice to reach goods a few feet away.
7. The ladders will very soon pay their cost by saving time in taking down and putting up goods. The top shelf is made wide on this account.
8. When once equipped with ladders and rail all expenses in that line are at an end.
9. Every one who has used them pronounce them PERFECT.
10. Should you have occasion to change your place of business, the ladders and rail (rail being made in sections) can be taken down and adjusted in another place.

In ordering Ladder Fixtures and Rail be particular to observe the following Directions:

FIRST.—State how many Ladders you will require. (Would suggest using one for every 30 to 50 feet of shelving.)
SECOND.—Give length of Rail required.
THIRD.—Give number of Standards in each line of shelving, and send a diagram giving distances from the centre of each Standard. This information is necessary in order for us to know the number of Brackets you will require.

PRICE OF ALL THE IRON WORK COMPLETE FOR THE LADDERS.

Roller Hangers and Braces	Per Pair or Set,	$12 00
Brackets for Holding Rail in Place	Each,	0 60
Jointed Rail, Finished with Splice Screws	Per Foot,	0 40

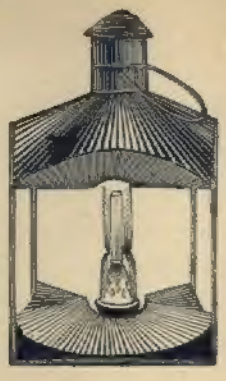
Ladders may be seen Working at

NOS. 17 AND 19 BEALE ST., NOS. 111, 113 AND 115 CALIFORNIA ST.,
NOS. 118 AND 120 MARKET ST., NOS. 117 AND 119 CALIFORNIA ST.,
SAN FRANCISCO.

Central Reflector Lamps.

Patented Sept. 6, 1879; Re-issued Feb. 8, 1881.

No. 3.



No. 4.

These Lamps have now been in use for the past ten years all over the Pacific Coast, in Mills, Mines, Hoisting Works, Stores, Warehouses, Railroad Stations, Wharves, Stables, Yards, Streets, etc., and have given the best satisfaction, both in brilliancy and economy. They are made of various styles, but the two illustrated above are the most in use, one being tapering toward the bottom, while the other is square down to the bottom. Both have the peculiar arched tapering roof over each side and glass, also the curved corrugated Reflectors, the difference in the two being in the construction of said Reflectors. The Tapering Lamp is made to reflect down and all around that main portion of the light which otherwise would go up, and will leave no shadow underneath; and such light is most desirable for working by. The Square Lamp has the Reflectors so constructed as to reflect the rays of light almost parallel in every direction. The Reflectors are corrugated to diffuse the light and prevent the dazzling of the eyes.

PRICES AND DESCRIPTION.

No. **3.**	13 x 18, Tapering Central Reflector Lamp, with No. 2 Flat or Argand Burner	Each, $5 00
No. **4.**	12 x 20, Square " " " " No. 2 " " " "	" 6 00

Patent Side Lanterns.

Mostly used to hang against the wall, but all having wire handles. The smaller sizes make a powerful hand lantern.

These Lamps are of the cheapest patterns, have glass on three sides and a tin back on the fourth, provided with a silvered glass reflector. The glasses are secured by simply setting the lower edge into the groove prepared for it at the bottom of the Lantern, while just above, on the top, are removable hook strips, which are then bent over the glasses. These patent hook strips can be replaced and any number added without soldering or other skillful labor. They may be bent short or long; will not tear off, and will allow all the elasticity required to give toward the glass to let it set free from strain and to allow it to expand.

The Patent Chimney Top is also of great importance in a lantern. It is made removable not only for cleaning the soot which might gather in the chimney top and would stop the draft, but also for the regulating of said draft. Thus when used in a windy place it should be screwed down so that the wind going through the perforated border of the outer chimney will strike against the collar or contracted end of the inner chimney, and will then force its way upward and out on the opposite side, but when the lantern is used in doors or under shelter, it is best to have the top raised up to allow more ventilation.

PRICES AND DESCRIPTION.

No. **1.**	With 6 x 10 Glass, 16 Inches High over all, with No. 1 Burner and 5 Inch Reflector	Each, $2 25
No. **2.**	" 8 x 12 " 20 " " " " " No. 2 " " 7 " "	" 3 00
No. **7.**	" 10 x 14 " 22 " " " " " No. 2 " " 9 " "	" 3 75
No. **8.**	" 12 x 16 " 24 " " " " " No. 3 " " 11 " "	" 5 00

Triangle Side Lamps.

No. **9.**	With 10 x 12 Glass, 20 Inches High over all, with No. 2 Burner and 7 Inch Reflector	Each, $3 00
No. **10.**	" 12 x 16 " 24 " " " " " No. 3 " " 9 " "	" 4 50

Hand Lamps.

Engineer's Hand Lamp.

Malleable Iron . . . . . Per Dozen, $7 50

Lanterns.

No. 3. Buckeye.

With Globe and Chimney . . . Per Dozen, $10 00

No. 4. Buckeye.

With Globe and Chimney . . . Per Dozen, $9 00

Nested Globes and Chimneys for Buckeye Lanterns.

No. 3 . . . . . Per Dozen, $3 00
No. 4 . . . . . " " 2 50

Railroad Lantern.

No. 390. With Double Guard . . . . . Per Dozen, $12 00

Lanterns.

Police Lantern for Sperm Oil.

2¼ Inch Diam., Bull's Eye . . Per Dozen, $9 00 | 3 Inch Diam., Bull's Eye . . . Per Dozen, $10 00

No. 0. Tubular.

No. 15. Tubular, for Dash Board.

No. 0. Tubular, Safety Lift, with Guards . Per Dozen, $10 50 | **No. 15.** Tubular, Fitted for Dash Board . Per Dozen, $18 00

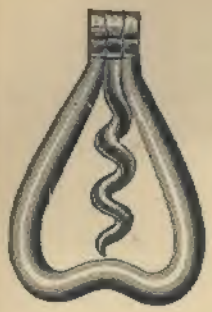
Globes for Nos. 0 and 15 . . . . Per Dozen, $1 50

Burner is No. 1 Convex, ⅝ Inch Wick.

The "Racket."

Brass Mounted, for House Use . . . . . Per Dozen, $8 00

Pocket or Folding Corkscrews.

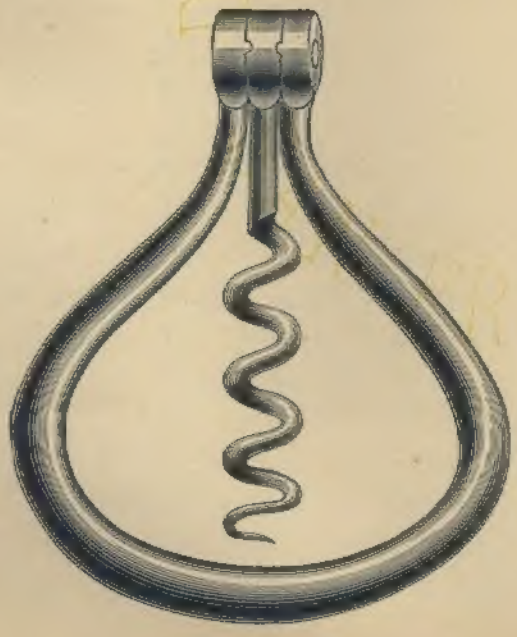


No. 10.

No. 1.

No. 4.

No. **10.**	Polished	Per Dozen, $4 00
No. **1.**	Nickel-Plated	" " 4 50
No. **4.**	" "	" " 5 25



Full Size Cut of No. 38.

Full Size Cut of No. 39.

Hand Forged from Best Cast Steel Rods.

No. **38.**	With Round Thread Screw	Per Dozen, $4 50
No. **39.**	" " " " and Champagne Knife	" " 7 50
No. **63.**	Same as No. 38, with Flat Thread Screw	" " 5 00

Extra Heavy Cast Steel Corkscrews.

About Half Size Cut of No. 27.

About Half Size Cut of No. 29.

Fancy, Rosewood Handle, with Champagne Opener, Hand Forged from Best Cast Steel Rods, Thick, Brass, Countersunk Cap, well Riveted Shank—cannot work loose in handle.

No. **27.** With Wire Cutter . . . . . Per Dozen, $7 50

No. **29.** " " " and Brush . . . . . " " 8 50

About Half Size Cut of No. 66.

Hand Forged from Best Cast Steel Rods, Thick, Brass, Countersunk Cap, well Riveted Shank—cannot work loose in handle.

No. **66.** Rosewood Handle . . . Per Dozen, $4 50

About Half Size Cut of No. 45.

Hand Forged from Best Cast Steel Rods.

No. **45.** Japanned Handle . . . Per Dozen, $3 50

Corkscrews.

About Half Size Cut of No. 124. Patented.

Hand Forged from Best Cast Steel Rods, Thick, Brass, Countersunk Cap, with Riveted Shank.

No. **124.** Nickel-Plated Frame . . . . . Per Dozen, $6 00

Ordinary Corkscrews.

No. **3257.** Bright . . . . . Per Dozen, $1 50
No. **3258.** Solid Cut . . . . . " " 2 50

Patent Lever Corkscrews.

About Half Size Cut of No. 125.

Hand Forged from Best Cast Steel.

No. **125.** All Nickel-Plated . . . . . Per Dozen, $10 00

"Cricket" Saw.

For Scroll Sawing alone it is about as good as the higher price Saws and the finish is the same as our Lester and Rogers' Saws. It has an Iron Tilting Table, Second growth Ash Arms, 18 Inches long, improved Clamps, etc.

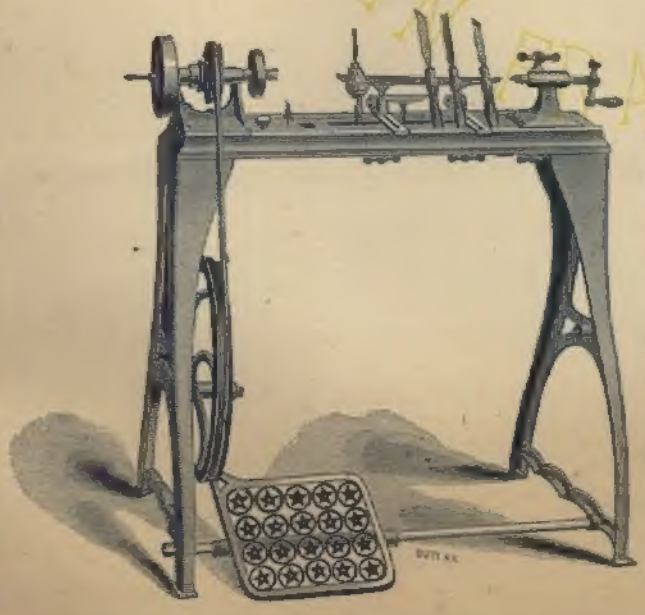
Price $4 50

No. 2. Bracket Sets.

These sets are packed in paper boxes, and embrace a Spring Steel Saw Frame, polished and nickel-plated, 5 x 12 inches, having patent Clamps for holding the Saw blades, rosewood handle. Fifty full sized designs, embracing a great variety of fancy and useful articles; 6 Saw Blades, 1 Awl, 1 Sheet of Impression Paper, and full directions for using the Saw.

Price . . . . . Per Dozen, $15 00

"Goodell" Lathe.



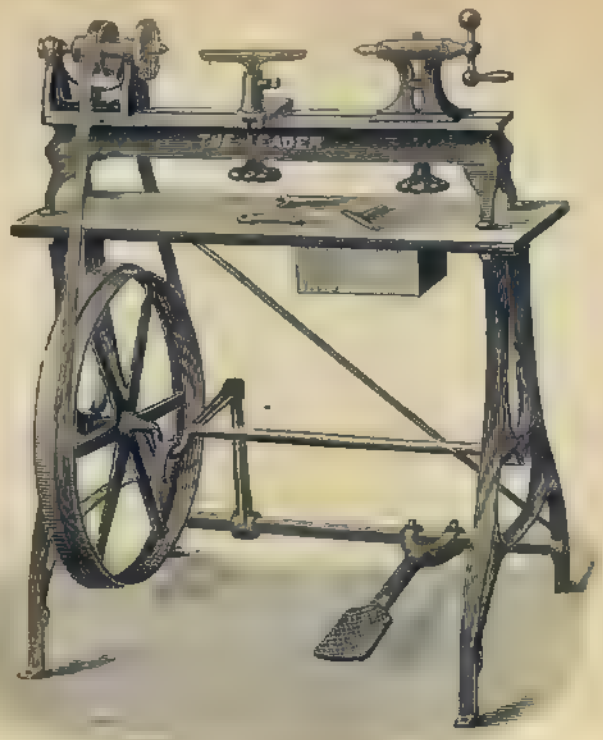
This Lathe was designed by Mr. A. D. Goodell, for many years the master mechanic at the factory in Miller's Falls, and the inventor of many valuable machines. It is patterned almost exactly after the latest improved Lathes now used in the best machine shops and pattern makers' rooms. The large driving wheel has two grooves of varying depths, on its face, to give a change of speed, as the belt runs from it to the cone pulley on the Lathe head. The higher speed is 11 to 1, the lower 7 to 1. The Lathe head is provided with a 2 inch face plate, a spur center, a screw center for turning cups, and also with a very nice drill chuck to hold from 1/32 to 1/4 inch round twist drills for drilling wood or iron. It also has on the outer side of the pulley a 4½ x ¾ inch solid emery wheel and a drill spindle, with set screw, to hold drill points for wood drilling. The tail stock has a screw feed center, which is secured at any point desired, by a clamping arrangement like that on the modern engine lathes. It is also provided with a long and short tool rest, 5 turning tools, wrench, drill points, etc., etc. Swing of lathe, 5 inches; length of bed, 24 inches; distance between centers, 15½ inches.

This Lathe is thoroughly built and highly finished, the planed and polished parts being nickel-plated.

Price of Lathe and Lathe Tools . . . $12 00

Combination Lathes.

Lathe without Saw Attachments.



This Lathe has been made especially to meet a want felt by many for a really good and substantially made foot-lathe at a reasonable price and we think that we can safely say that it is by far the best lathe ever placed on the market at the price asked. The bed, head, and tail stocks are of iron, the spindles of steel. The bearings of the head stock are conical, so that the wear can be easily taken up.

Material 18 inches long and 8 inches in diameter can be turned on it.

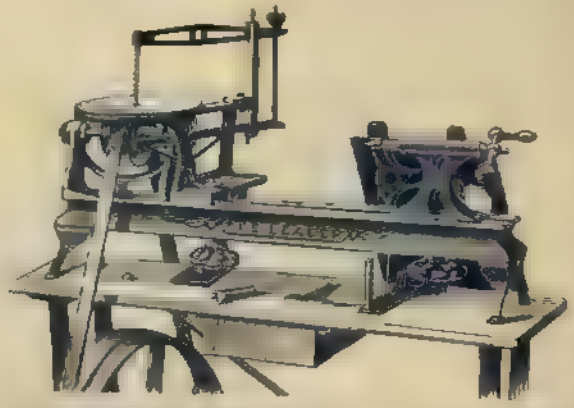
The pieces that accompany this lathe without extra charge are 2 T rests, 2 plain centers, 1 spur center for wood turning, and 1 face-plate.

The bench is made of iron, with a walnut top and drawer for holding tools. Like the lathe, it is well made in all its parts, and is strong, neat and solid.

Circular Saw Attachment.

The above Circular Sawing Attachment is intended for those who desire a good, practical machine, and will be found very effective. The table is of iron planed true, and can be adjusted as to height. It has a guide running in a groove at right angles with the saw, and a slide operated in a similar groove parallel to the saw. The slide can also be adjusted to different angles. One each 4 inch slitting and cutting-off saws accompany this Attachment.

Scroll Sawing Attachment.

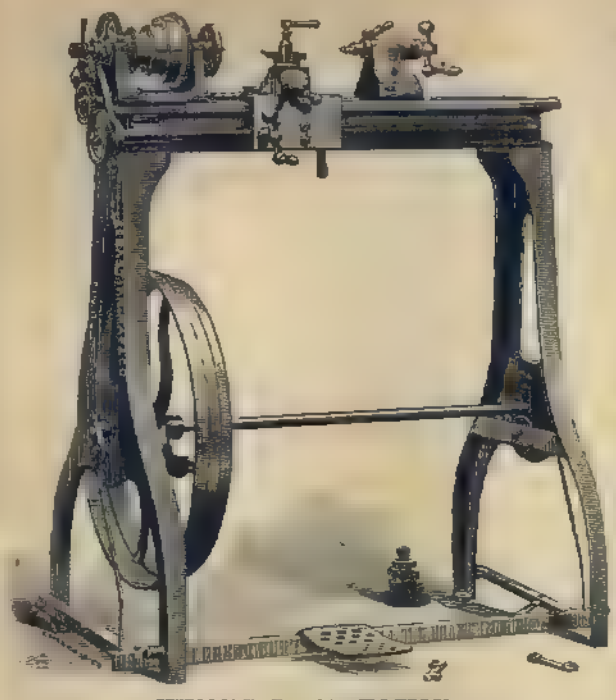


This Attachment, like that for Circular Saws, is a good and thoroughly practical machine, sawing wood at least 1½ inches thick. It is moved by a Pitman connecting it with the face-plate by means of a small stud. The bolt of the T rest holder is used for fastening this attachment to the lathe, and when not in use it can be thrown back behind the shears without entirely removing from the lathe, unless so desired.

The depth between the saw and back or upright is 15 inches.

Price of Lathe, without Saw Attachments	$45 00
" " " WITH SCROLL Saw Attachments	55 00
" " " with both Scroll and Circular Saws	70 00

Light Screw-Cutting Lathe.



SWINGS 8 x 20 INCHES.

The cut represents a new Screw-Cutting Engine Lathe, which swings 8 inches over shears, 20 inches between centers, and weighs 250 pounds. It is made of iron from the floor up, and finished in the most complete and workmanlike manner

This Lathe is made from entirely new patterns, and is of the latest design and very best workmanship.

For Model-makers, Inventors, Electricians, Sewing Machine Agents, Amateurs, and others having use for a small Screw-Cutting Lathe, it is just the tool that is wanted, and is specially designed for their business and purposes

With this Lathe you can turn iron, steel, brass, bone, wood or ivory. Also polish, drill, do milling, screw-cutting, or any other kind of work that can be done on any larger lathe proportionately, and can do all the above satisfactorily, as it is designed for solid work, not being a mere toy or plaything.

The bed has four V's, is 6¼ inches wide, and is thoroughly braced.

The head-stock is a three-speed cone for one-inch belt. The back gear is thrown in and out by a cam. The head is detachable, so as to admit of re-adjustment should the spindle become untrue. All bearings are scraped. The tail stock sets over for turning tapers and is fastened down by a cam

By moving the head stock and driving wheel to the foot of the lathe large surfaces may be turned or polished. This is a great feature for pattern makers, and others

The carriage and rest is of the most approved and latest design. It is gibbed to the bed both front and back. It is detachable for hand work and can be thrown into feed instantly for turning or screw cutting. All thread for screws are bastard, that is, half square half V. The gears are cut from solid metal in the best machinery known for gear cutting, and are as true and noiseless as it is possible for metal gear to be.

The treadle is of wrought angle iron, the rod supporting the driving wheel runs on friction wheels; the driving wheel weighs about 60 pounds, is turned and polished, the Pitmans slip through a hole in the foot bar, so that if you get your foot under the treadle it will not be injured, nor will the treadle unhook. The top of the Pitmans are of gun metal, and the length of the stroke is adjustable

The foot motion is the easiest lightest, and stiffest one known, and runs the lathe almost without an effort. The head spindle is made of 1¼ inch solid steel and is run in gun metal boxes, provision being made to take up all wear and keep them true. The tail spindle is ⅝ of an inch in diameter

Either right or left hand threads may be cut with this lathe We furnish gears to cut from 3 to 40 threads, to the inch, as per index Other threads may be cut by using extra gears, which we can furnish to order

With this Lathe we furnish a face-plate, two pointed centers, wrenches and gears to cut all the threads, as per index.

Index for Lathe.

SCREW IS FIVE THREADS TO THE INCH

No. Threads	3	4	5	6	7	8	9	10	11	12
Spindle . .	40	40	40	40	40	40	40	40	20	20
Screws . .	48	64	40	48	56	64	72	80	44	48
Stud . . .	2to1	2to1	..	..	..	..	..	..	..	..

No. Threads	14	16	18	20	22	24	28	32	36	40
Spindle . .	20	20	20	20	20	20	20	20	20	20
Screws . .	56	64	72	80	44	48	56	64	72	80
Stud . . .	.	..	..	..	1to2	1to2	1to2	1to2	1to2	1to2

Rules for Gearing an Engine Lathe.

Divide the number of threads in a given length of the screw which is to be cut, by the number of threads in the same length of the leading screw of the lathe, and the quotient is the ratio that the wheel on the end of the screw must bear to that on the end of the lathe spindle.

Compound Gearing.

Multiply the gear on the spindle by the thread you wish to cut, then divide by the gear in contact with spindle gear, then multiply by the gear in contact with screw gear, then divide by the number of threads on the lathe screw, and the quotient will be the gear for the lathe screw

PRICE LIST AND DESCRIPTION

SWING	BETWEEN CENTERS	LENGTH OF BED	WEIGHT	PRICE
8 Inches.	20 Inches.	36 Inches.	250 Pounds	$65 00

THE FOLLOWING MADE TO ORDER.

LATHES TO SWING	BETWEEN CENTERS	LENGTH OF BED	WEIGHT	PRICE
8 Inches.	30 Inches.	46 Inches.	270 Pounds.	$75 00
8 "	36 "	52 "	280 "	80 00

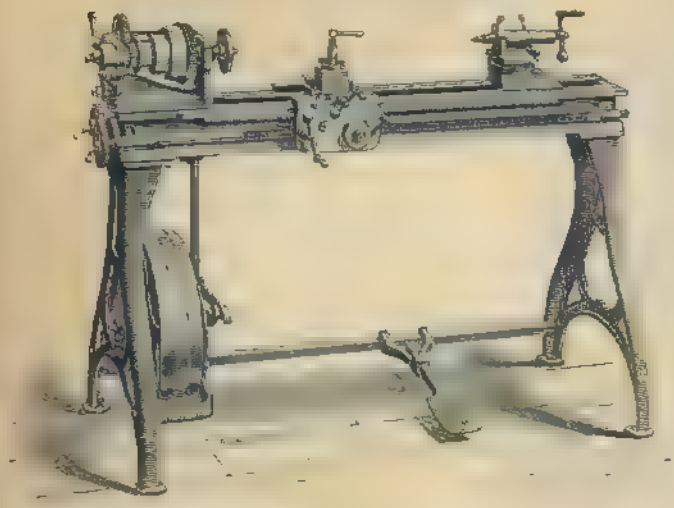
Countershaft.

For Above Lathe $9 00

Screw Cutting Lathe.

Foot Power Engine Lathe.

11 INCH SWING WITH PLAIN GIB REST.



DESCRIPTION OF LATHE, 4 FEET BED.

The Lathe occupies a floor space of 28 x 48 inches, the centers being 44 inches high from the floor; the bed is 48 inches long, 6½ inches wide, 5½ inches deep, with double Vs. for Carriage and Tail Stock. It swings 10 inches over bed and 6 inches over Carriage, and will turn 26 inches long.

The Head Stock is back geared, and the cone has three speeds for 1½ inch belt, the smaller being 3 inch diameter, the larger 6 inch diameter; thus, with the back gears, gives six different speeds, the fastest giving about 1,000 revolutions of the Arbor to 100 of the Balance Wheel, and the slowest 75 of the Arbor to 100 of the Balance Wheel; this gives a sufficient range for all kinds of work.

The Carriage has a rack and pinion for moving it by hand, and a split nut moved by a cam on the face of Carriage to throw it in gear with screw; the reversing motion is in Head Stock.

The Tool Post has a slot for tools ⅜ x 1⅛ inch; the tool is adjusted by a wedge made on the arc of a circle and fitted to a convex washer. The leading screw runs the whole length of Lathe, and has 10 threads to the inch. A set of gears go with the Lathe, which will cut all common threads and a great variety of other sizes, by compounding them. There is a screw stop on the Carriage for screw cutting, etc.

The Tail Stock can be set over for turning tapers, etc. The spindle of Tail Stock is 1 1/16 inch diameter, and has a motion of 3 inch. The center is fitted to a taper hole which is the method adopted by all the best makers, and is the same size as the one in Head Stock, so that chucks and other tools fitted to one can be used in the other.

The Foot Motion we consider the best made, the crank is adjustable and the shaft has swivel bearings, the Balance Wheel is 22 inch diameter, and has three speeds to match Cone on Head Stock: cuts Screws from 5 to 32 threads to the inch.

Hollow Steel Spindle in Head, receives Rods up to ½ inch in diameter.

Foot Power, Bed 4 Feet	$180 00
" " " 5 "	200 00
Overhead Pulleys for Same	12 50

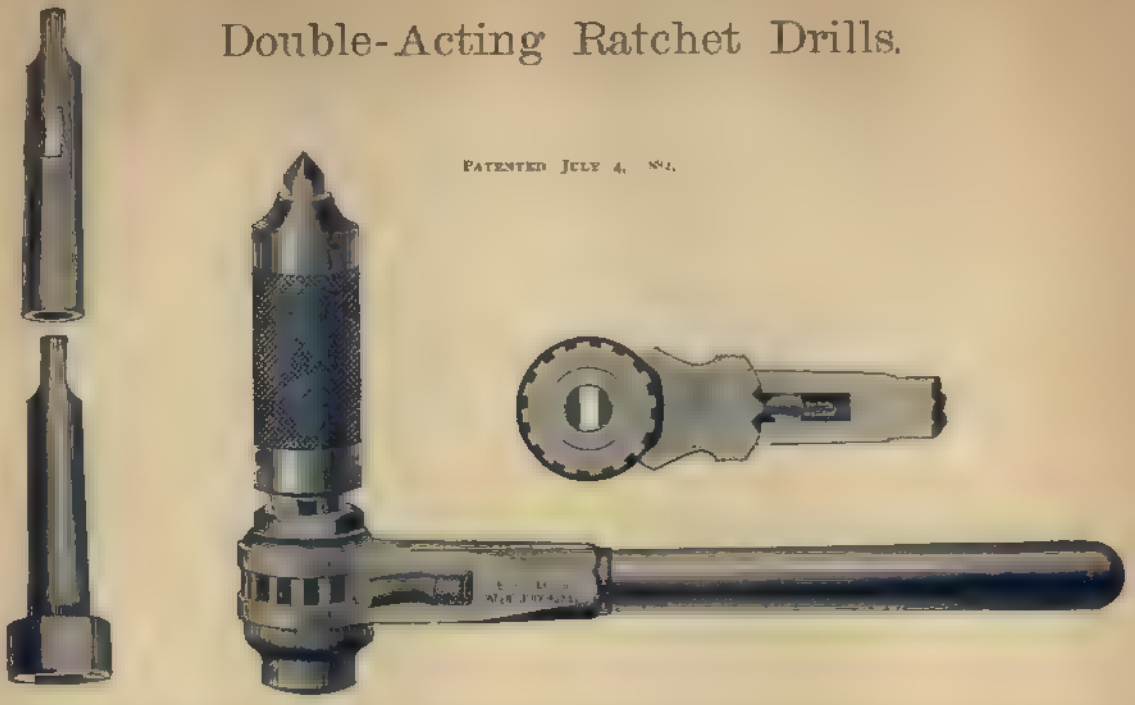
The "Briggs" Lathe.

DESCRIPTION OF THE "BRIGGS" LATHE.

This Lathe will turn a piece of wood or metal 12 inches long and 6 inches in diameter. It can be used with equal advantage for Drilling, Polishing, Sawing, etc., etc. The length of bed is 24 inches; the spindle is made of steel, has a conical bearing, and can be tightened as it wears. The bed, head, tail stocks and cone pulley are of cast iron and the centers of steel. The following pieces are furnished with the Lathe: 2 T rests, 1 face-plate, 2 plain centers, 1 spur center for wood, 1 plain drill chuck, 1 drill pad and 1 center left blank to turn down as a fitting for a universal chuck. The bench weighs 81 pounds, is made of iron, with a black walnut top, and has a driving wheel measuring 22 inches in diameter, with three grooves for changes of speed.

Lathe, 24 Inch Bed	$25 00
" 30 "	30 00

Double-Acting Ratchet Drills.



PATENTED JULY 4, 82.

These Drills are made in two sizes. They are Drop-Forged of the best bar iron and steel for the purpose and are made to use Morse Taper Shank Twist Drill, also provided with Socket, with square hole for Square Shank Drill. This Drill can be changed from Right-hand to Left hand Drilling by simply moving the pawl to right or left. The Sockets furnished with the Drill can be utilized in any drilling spindle that may be fitted to receive them

Price, without Drills.

No. **1.** 10 3/4 inch Handle with one Socket taking Morse Taper Shank Drills, from 1/4 inch to 29/32 inch inclusive, and one Socket taking Flat Drills $14 00

No. **2.** 13 3/4 inch Handle, with Sockets taking Morse Taper Shank Drills, from 1/4 inch to 1 1/4 inch inclusive, and one Socket for Flat Drills 18 25

"Weston's" Ratchet Drills.

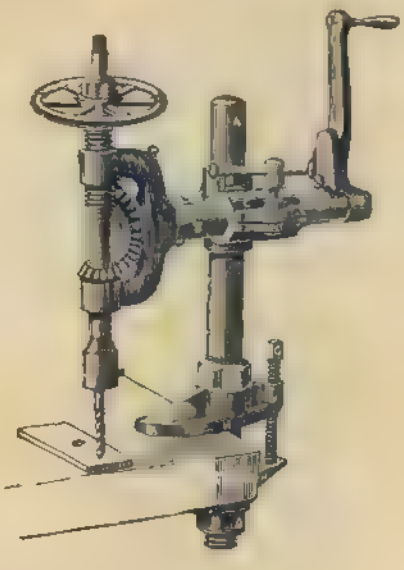
Style "A"

Style "B"

PRICES AND DESCRIPTION

"A."	Drill for General Purposes, Length of Lever 12 Inch	Each, $8 00
"	" " " " " " 14 " .	" 8 50
"B."	Boiler Ratchet for Confined Places, Length of Lever 14 Inch, Space required 3 1/2 Inch, Feeds 5/8 Inch .	" 8 00

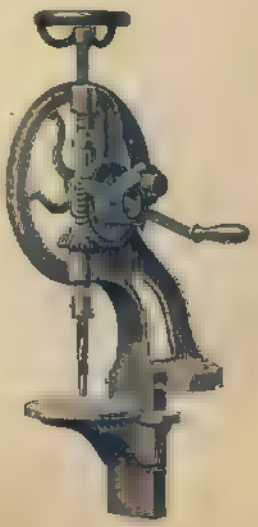
The Improved Patent Universal Angular and Ratchet Drilling Machine.



No. 1.	Weight, 26 lbs, Drills up to ⅝ Inch Hole	$25 00
No. 2.	" 52 " " " " 1 " "	30 00
No. 3.	" 106 " " " " 1¼ " "	45 00

Upright Bench Drills.

No 8.



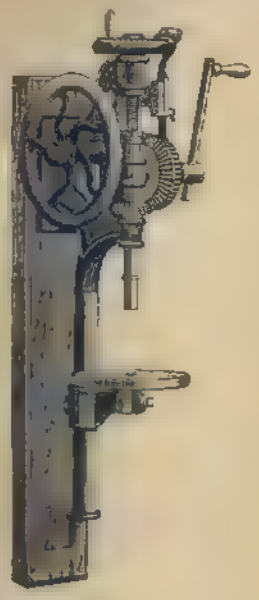
No 9.

No. 8.	Drills ⅛ to ¾ Inch Hole, Weighs 55 lbs	$12 00
No. 9.	" ⅛ " ⅝ " " " 75 "	15 00

PRICES GIVEN ON ALL ABOVE ARE FOR MACHINES ONLY. TWIST DRILLS ARE EXTRA.

Upright Self-Feeding Drills.

No. 0.
Suitable for Drills from
1/16 to 3/8 Inch.



Length, 26 Inches.
Weight, 30 lbs.

No. 1 1/2.
Suitable for Drills from 1/8 to 1 Inch

Length, 44 Inches. Weight, 120 lbs

No. 1.
Suitable for Drills from
1/8 to 3/4 Inch.

Length, 42 Inches
Weight, 98 lbs.

PRICES AND DESCRIPTION.

No. 0.

The above is fitted for a No. 2 Bench Chuck, or can be used without

Price, $20 00

No. 1.

Has 3 Changes of Automatic Self Feed Instantly Adjusted from Fine to Coarse

Price, $28 00

No. 1 1/2.

This machine has nearly a continuous feed, which may be quickly adjusted by a Thumb-Screw to three rates of speed A fast or slow motion may be given the Drill by changing the handle from shaft **A** to shaft **B**, as desired by the operator

By this arrangement the capacity of the Drill has been increased nearly one-third.

Price, $34 00

Arranged for Power with 1 Pulley in place of Balance Wheel without extra charge.

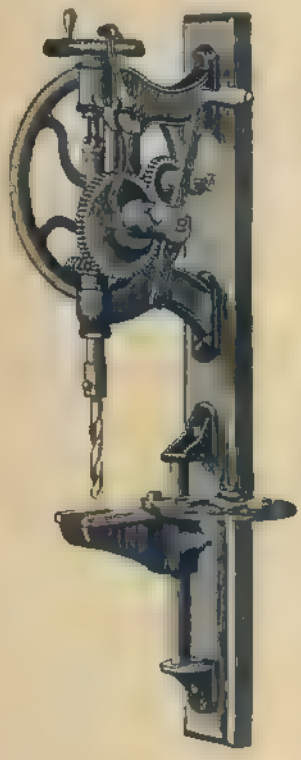
One Pulley, with Balance Wheel, $1 50 Extra.

TWIST DRILLS ARE NOT INCLUDED IN THE ABOVE PRICES.

Upright Self-Feeding Drills.

No. 2.

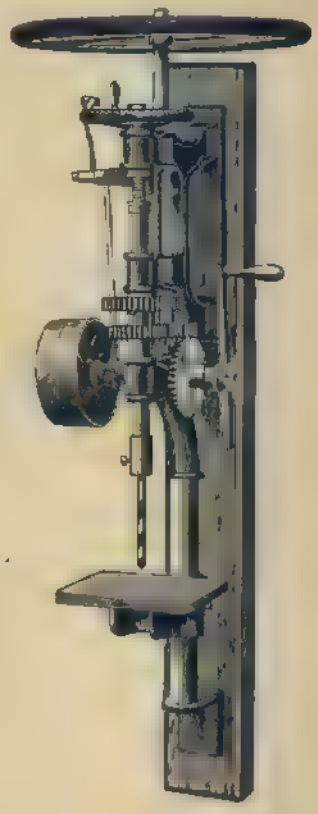
Suitable for Drills from ⅛ to 1¼ Inch.



Length, 54 Inch. Weight, 160 Lbs.

No. 3.

Suitable for Drills from ¼ to 1½ Inch



Length, 65 Inch. Weight, 250 Lbs.

PRICES AND DESCRIPTION.

No. 2.

No. 2 is similar to No. 1 1/2 on preceding page, and has all the late improvements. The Swing Table as applied to these machines will be found useful in many ways, and much more convenient than the old method of driving them in and out with a hammer, thereby running the risk of breaking the foot-piece. It is out of the way when not in use and may be quickly swung into position when wanted

Price, $48 00

Arranged for Power with Pulleys, $52 00

Arranged for Power with one Pulley in place of Balance Wheel without extra charge.

One Pulley, with Balance Wheel, $1 50 Extra

No. 3.

No. 3 has cut gears so arranged that a quick or slow motion may be given the Drill as desired for light and heavy work, making it a desirable tool for the machine shop or factory, answering as well as higher cost machines. Can be used for either Hand or Power.

Price, with Pulleys, $79 00

TWIST DRILLS ARE NOT INCLUDED IN THE ABOVE PRICES.

Butcher's Scales.

"A"

"A" Pattern, with Circular Dial.

GLASS FACE

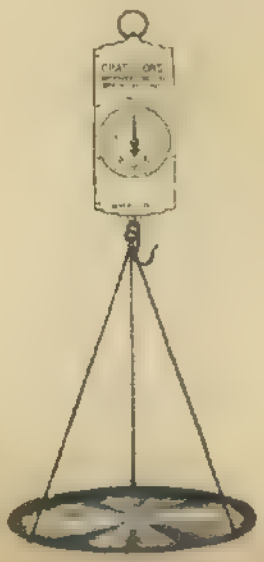
Marbleized Pan, 2 Bows, 60 lbs	Each,	$10 75
Porcelain " 2 " 60 "	"	10 75
Tin " 2 " 60 "		8 50

"C"

California Pattern, Black Walnut Case

GLASS FACE

Copper Pan, 2 Heavy Brass Bows, 60 lbs	Each,	$20 00
Marble " 2 " " " 120 "	"	25 00

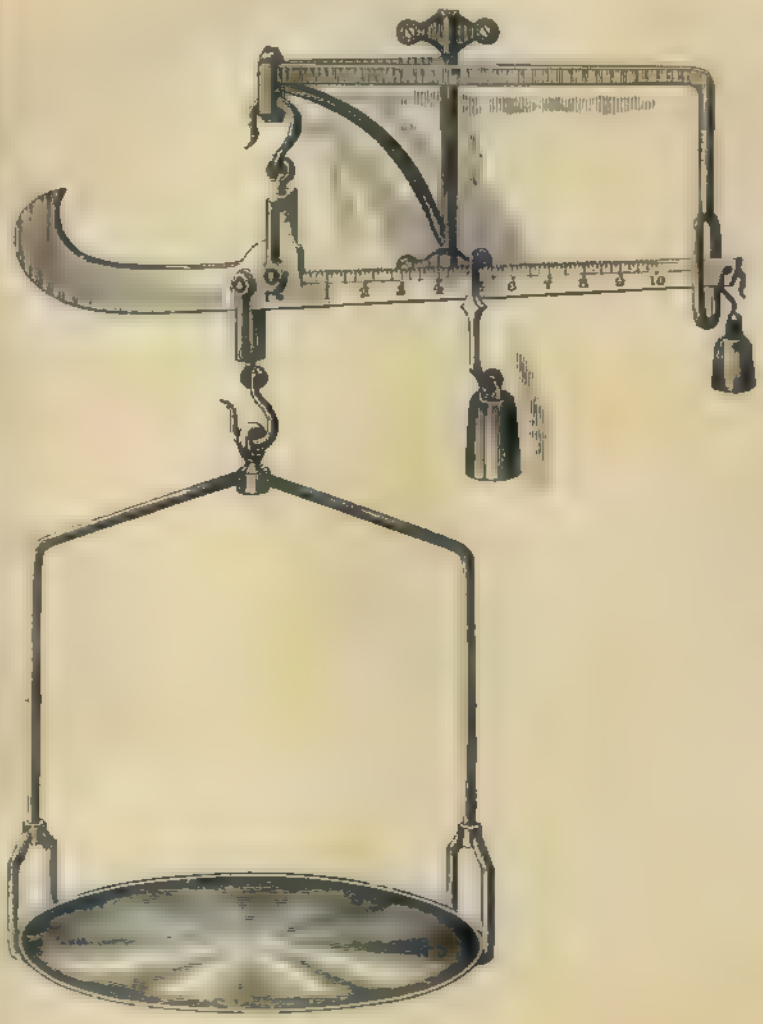


"B" Pattern, with Plain Open Dial.

Round Pan and Hook, 3 Chains, 30 lbs	Each,	$5 50
Square " " " 24 " 30 "		6 00

Butcher's Scales.

BOSTON MARKET BEAM SCALE.



Boston Market Beam Scale.

Tinned Copper Pan,

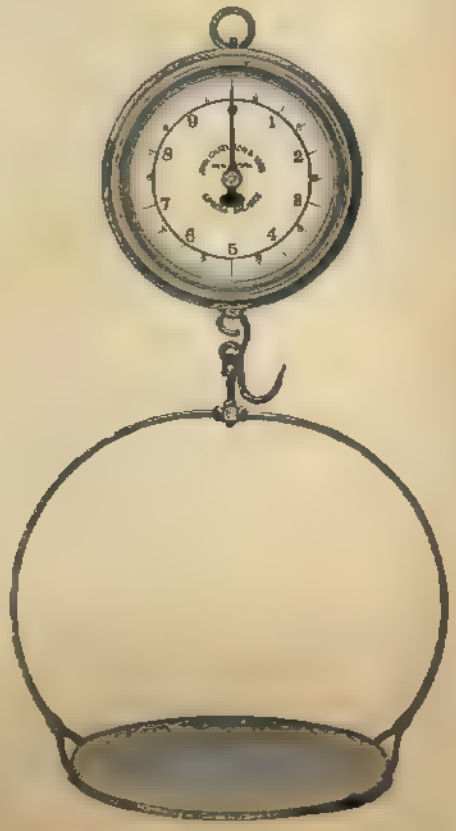
Two Heavy Brass Bows,

Beams and Weights,

Nickel-Plated.

125 lbs . . . . . Each, $25 00

CIRCULAR SPRING BALANCES.



Nos. 4266 E and 4276 E.

Circular Spring Balances.

Large Circular Dial, Glass Face, Porcelain Enameled Pans,

Nickel-Silver, Strengthened Edges,

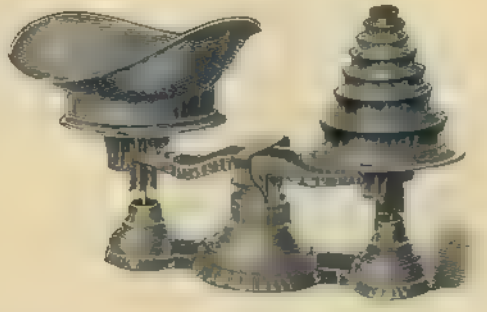
Nickel-Plated Bows.

No. **4266 E.** 30 lbs, by 1 oz., 13 inch pans . . . . . Each, $10 00

No. **4276 E.** 60 " " 2 " 13 " " 12 00

Tea and Counter Scales.

TEA SCALES.



No. 1. Japanned, with Tin Scoop, ½ oz. to 4 lbs . . . . . Per Dozen, $15 00
No. 4. Painted Red, with Brass Scoop, ¼ oz. to 4 lbs . . . . . " " 24 00

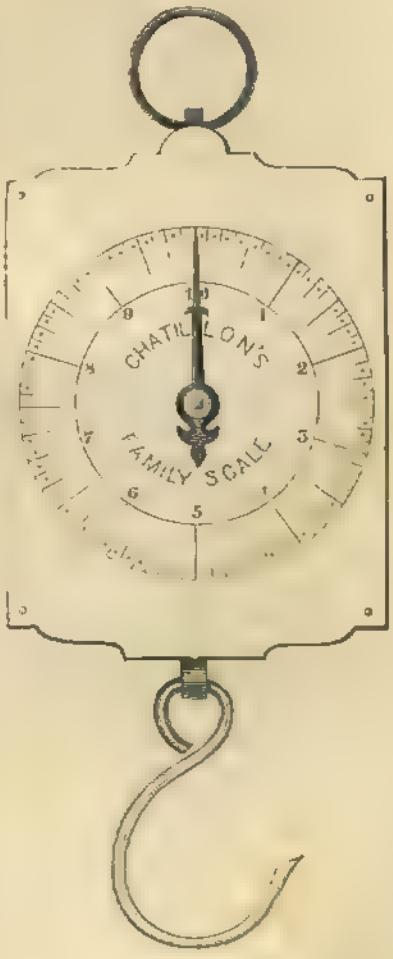
"HATCH'S" COUNTER SCALES.

No. 1. Japanned, with Tin Scoop, ½ oz. to 8 lbs . . . . . Per Dozen, $24 00

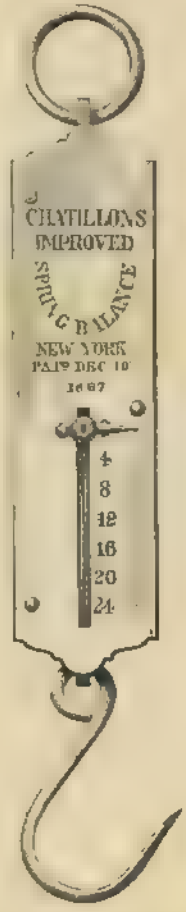
The Standard Union Counter Scales.

Japanned with Tin Scoop, Single Beam, Steel Bearings, ½ oz. to 240 lbs . . . . . Each, $5 00

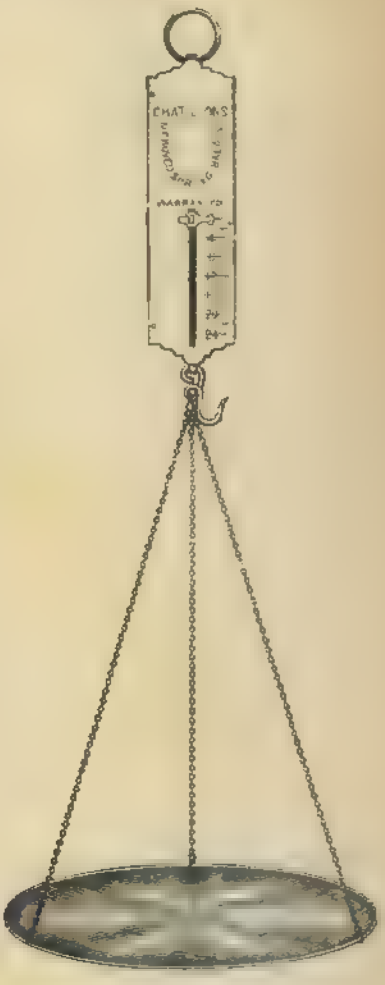
"Chatillon's" Spring Balances.



No. 240. Family Scale.



No. 40. Straight, with Hook.



No. 41. Straight, with Round Pan

Straight, with Hook.

No. **20.**	To Weigh 24 lbs, by ½ lb	Per Dozen, $ 1 60
No. **40.**	" " 24 " " ½ " heavy	" " 4 00
No. **30.**	" " 48 " " 1 "	" " 3 50
No. **70.**	" 50 " " 1 " heavy	" " 10 00

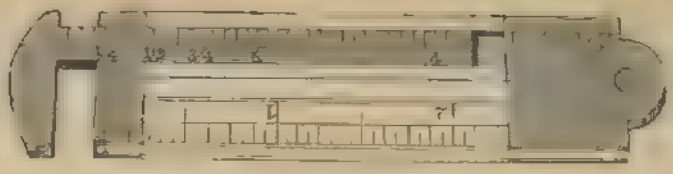
Straight, with Round Pan.

No. **41.**	To Weigh 24 lbs, by ½ lb	Per Dozen, $ 7 00
No. **71.**	" " 50 " " 1 "	" " 20 00

Family Scale, Round Dial.

No. **240.**	To Weigh 20 lbs, by 1 oz	Per Dozen, $42 00

Boxwood Rules Caliper.



No. 95. 6 Inch, Square Joint.

6 Inch, with 8ths and 16ths.

No. **95.**	Square Joint, Two Fold, 6 Inch, 7/8 Inch Wide	Per Dozen,	$ 7 00
No. **96.**	" " " " 6 " Brass Case, 7/8 Inch Wide	" "	8 00
No. **97.**	" " " " Bound, 6 Inch, 7/8 Inch Wide	"	12 00
No. **100.**	" " " " 6 Inch, 1 3/8 Inch Wide	" "	12 00

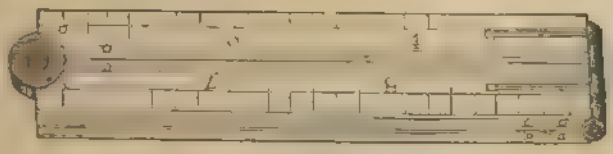
No. 99. 12 Inch Square Joint.

12 Inch, with 8ths and 16ths.

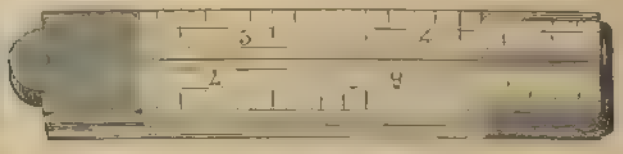
No. **98.**	Square Joint, Edge Plates, Four Fold, 12 Inch, 7/8 Inch Wide	Per Dozen,	$12 00
No. **99.**	" " Bound, " " 12 " 7/8 " Wide	" "	20 00

Boxwood Rules.

ONE FOOT. FOUR FOLD. NARROW.



No. 70. Round Joint.



No. 72. Square Joint.

No. 75. Arch Joint.

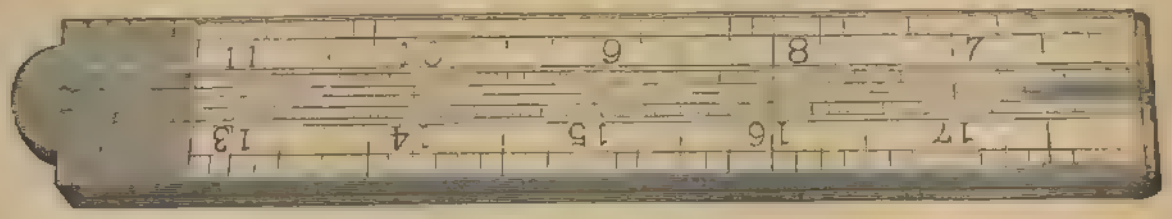
No. **70.**	Round Joint, Middle Plates, 8ths and 16ths, 5/8 Inch Wide			Per Dozen,	$ 3 00
No. **71.**	Square " " " " " " 5/8 "			" "	3 50
No. **72.**	" Edge Plates, " " " 5/8 "			" "	5 00
No. **72½.**	" " Bound " " " 5/8 "			" "	11 00
No. **73.**	Arch " Middle Plates, " " " 5/8 "			" "	4 00
No. **74.**	" " Edge Plates, " " " 5/8 "			" "	6 00
No. **75.**	" " Bound " " " 5/8 "			" "	12 00

Boxwood Rules.

TWO FEET. FOUR FOLD.

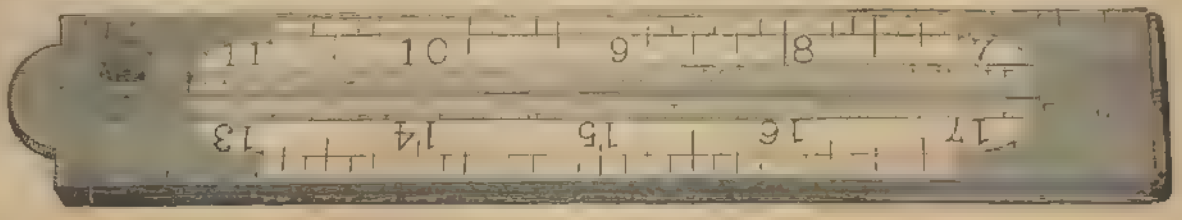
No. 41. Round Joint, Middle Plates.

No. **41.** Round Joint, Middle Plates, 8ths and 16ths, 1 Inch Wide . . . . . Per Dozen, $4 00
No. **42.** Square " " " " " " 1 " " . . . . . " 5 00
No. **44.** " " " " " " " 3/4 " " Extra Narrow . . . . . " 5 50



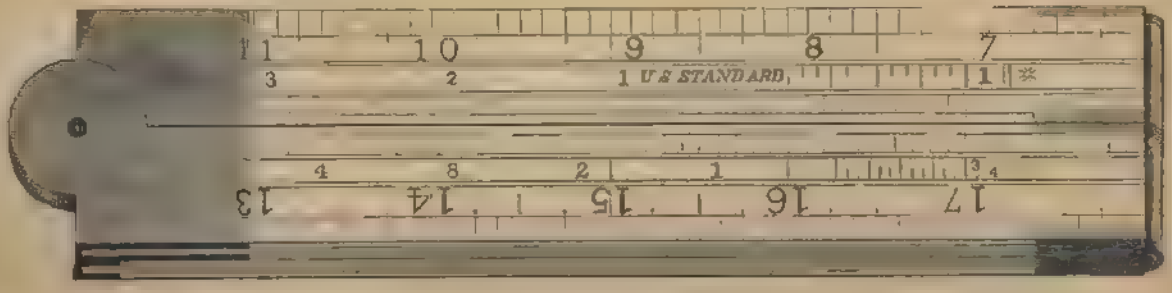
No. 42 1/2. Square Joint, Half Bound.

No. **42¼.** Square Joint, Half Bound, 8ths, 12ths, and 16ths, 1 Inch Wide . . . . . Per Dozen, $12 00
No. **42½** " " Bound " " " " 1 " " . . . . . " 15 00



No. 50. Double Arch Joint

No. **50.** Double Arch Joint, Middle Plates, 8ths, 12ths, and 16ths, 1 Inch Wide . . . . . Per Dozen, $ 9 00
No. **52.** " " " Bound " " " " 1 " " . . . . . " 21 00



No. 56. Square Joint, Edge Plates.

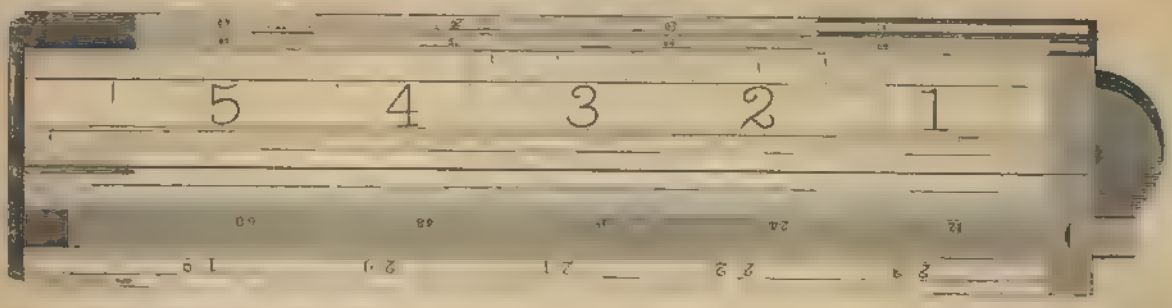
No. **54.** Square Joint, Middle Plates, 8ths and 16ths, 1 3/8 Inch Wide . Per Dozen, $ 7 00
No. **56.** " " Edge " 8ths, 16ths and Scales, 1 3/8 Inch Wide " 9 00
No. **54½.** " " Bound " " " " 1 3/8 " " " 18 00

TWO FEET, FOUR FOLD, BROAD.—BOARD MEASURE.

No. **64.** Square Joint, Edge Plates, 12ths, 16ths and Scales, 1 3/8 Inch Wide . . . . . Per Dozen, $11 00

Boxwood Slide Rule.

TWO FEET, FOUR FOLD.



No. **83.** Arch Joint. Divided into 8ths, 12ths and 16ths. Per Dozen, $14 00

Boxwood Rules.

No. 14. Arch Joint Gunter Slide.

TWO FEET, TWO FOLD, WITH SLIDE.

No. **23.** Arch Joint, Plain Slide, 1 1/2 Inch Wide . . . . . Per Dozen, $11 00
No. **11.** " " Gunter Slide, 1 1/2 Inch Wide . . . . . " " 14 00

TWO FEET, TWO FOLD, WITHOUT SLIDE.

No. **15.** Arch Joint, Extra Thin, 8ths and 16ths of Inches, Drafting and Octagonal Scales, 1 1/2 Inch Wide Per Dozen, $10 00
No. **17.** " " Bound, " " " " " " " " " " " " " " 16 00

Two Feet, Six Fold Rules.

No. **58½.** Arch Joint, Bound, 8ths, 10ths, 12ths and 16ths, 3/4 Inch Wide . . . . . Per Dozen, $36 00

Three Feet, Four Fold Rules.

No. **66½.** Arch Joint, Middle Plates, 8ths and 16ths, 1 Inch Wide . . . . . Per Dozen, $8 00

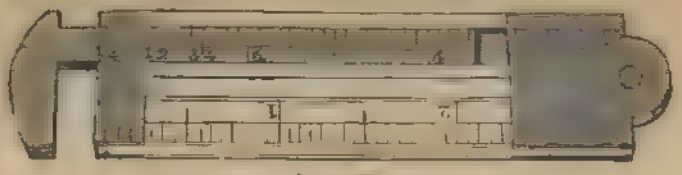
Architects' Rules, with Beveled Edges.

No. **39.** Arch Joint, Edge Plates, 8ths, 10ths, 12ths and 16ths of Inches, with Inside Beveled Edges, and Architects' Drafting Scales. Per Dozen $20 00

Ship Carpenters' Bevels.

No. **30.** Boxwood, Double Tongue . Per Dozen, $6 00 | No. **31.** Boxwood, Single Tongue . Per Dozen, $6 00

Ivory Rules—Caliper.

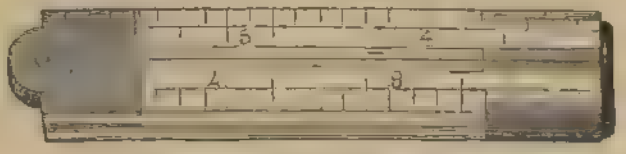


No. 97½.

No. 98½.

			Per Dozen
No. 97½	Square Joint, German Silver, Bound,	Two Fold, 6-in., 8ths, 10ths, 12ths and 16ths, Slide in 32ds, ¾ in. Wide,	$30 00
No. 98½	" " " " Edge Plates, Four "	12-in., 8ths, 10ths, 12ths " 16ths, " " " ⅞ " "	38 00
No. 99½	" " " " Bound, " "	12-in., 8ths, 10ths, 12ths " 16ths, " " " 1 " "	44 00
No. 99½	" " " " " "	12-in., 8ths, 10ths, 12ths " 16ths, " " " 1⅛ " "	48 00

Ivory Rules.



No. 91. Square Joint.

IVORY RULES. ONE FOOT, FOUR FOLD.

			Per Dozen.
No. 91.	Square Joint, German Silver, Edge Plates, 8ths, and 16ths, ½ in. Wide		$17 00
No. 91½.	" " " " "	8ths, 10ths, 12ths and 16ths, ⅝ in., Wide	23 00
No. 92.	" " " " Bound,	8ths, 10ths, 12ths and 16ths, ⅝ " "	28 00

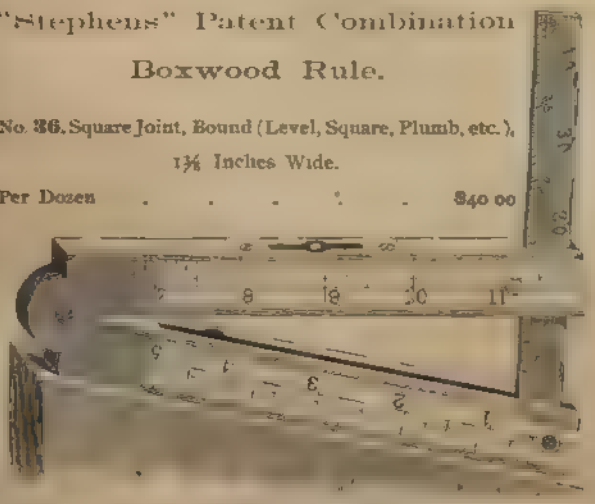
IVORY RULES. TWO FEET, FOUR FOLD.

			Per Dozen.
No. 77.	Square Joint, German Silver Edge Plates, 8ths, 10ths, 12ths and 16ths of inches, and 100ths of a foot, ¾ in. Wide		$54 00
No. 78.	" " " Bound,	8ths, 10ths, 12ths and 16ths " " ¾ in. Wide	72 00
No. 83.	Arch Joint, " " Edge Plates, 8ths 12ths and 16ths of inches, 100ths of a foot, and Drafting Scales, 1 in. Wide		64 00
No. 84.	Arch Joint, German Siver, Bound, 8ths, 12ths and 16ths of inches, and Drafting Scales, 1 in. Wide		80 00
No. 86.	Double Arch Joint, German Silver, Bound, 8ths, 12ths and 16ths of inches, and Drafting Scales, 1 in. Wide		92 00

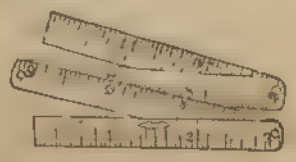
"Stephens" Patent Combination Boxwood Rule.

No. 36. Square Joint, Bound (Level, Square, Plumb, etc.), 1⅜ Inches Wide.

Per Dozen $40 00

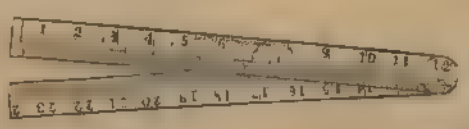


"Chesterman's" Steel Folding Rules.



Made from No. 20 tempered spring steel. Can be bent around 3 inch circle; folds into 3 inch.

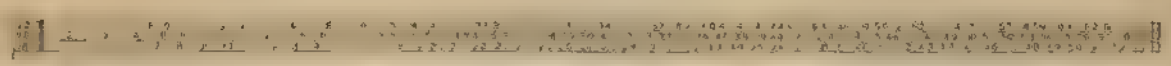
Size, 1 foot . Each, $0 25 | Size, 2 feet . Each, $0 50



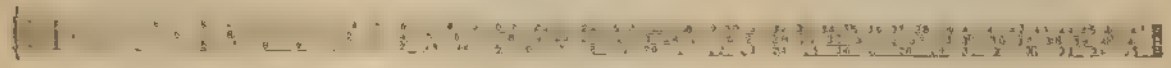
Half Inch Wide, 1 Joint, 1 foot long . . Each $0 30

Board and Log Measures.

No. 43½



No. 49



No. 48

NOTE. Nos. 43½, 48 and 49 give the contents in Board Measure of 1 inch Boards.

DIRECTIONS.—Place the stick across the flat surface of the Board, bringing the inside of the Cap snugly to the edge of the same; then follow with the eye the Column of figures in which the width of the Board is given as the first figure under the Cap, and at the mark nearest the opposite edge of the Board will be found the contents of the Board in feet.

NOTE.—The Log Measure No. 48½ has Doyle's Revised Tables, and gives the number of feet of one inch square edge boards, which can be sawed from a log of any size from 2 to 36 inches in diameter and of any length. The figures immediately under the head of the Cane are for the lengths of Logs in feet. Under these figures on the same line at the mark nearest the diameter of the Log will be found the number of feet the Log will make.

No. 43½.	Board Stick, Flat, Hickory, Cast Brass Head and Tip, 6 Lines, 12 to 22 Feet	3 Ft. Long,	Per Doz.,	$12 00
No. 49.	Board Stick, Flat, Hickory, Steel Head, Brazed, Extra Strong, 6 Lines, 12 to 22 Feet	3 "	" "	26 00
No. 48.	Walking Cane Board Measure, Octagon, Hickory, Solid Cast Brass Head and Tip, 8 Lines, 9 to 16 Feet	3 "	" "	12 00
No. 48½.	Walking Cane, Log Measure, Doyle's Revised, Octagon, Hickory, Solid Cast Brass Head and Tip	3 "	" "	15 00

Miscellaneous Articles.

BENCH RULES.

No. 34.	Bench Rule, Maple, Brass Tips	2 Feet Long,	Per Dozen,	$3 00
No. 35.	" " Board Measure, Brass Tips	2 " "	" "	6 00

PATTERN MAKERS' SHRINKAGE RULES.

No. 30.	Pattern Makers' Shrinkage Rule, Boxwood, 8ths and 10ths of Inches.	24½ Inches Long,	Per Dozen,	$15 00

WANTAGE AND GAUGING RODS.

No. 44.	Wantage Rod, 8 Lines		Per Dozen,	$5 00
No. 37.	" 12 "		" "	7 00
No. 45.	Gauging " 130 Gallons	3 Feet Long,	" "	7 00
No. 45½.	" " 180 " and Wantage Tables	4 " "	" "	18 00

YARD STICKS.

No. 33.	Yard Stick, Polished		Per Dozen,	$2 00
No. 41.	" " Brass Tips, Polished		" "	3 50
No. 50.	" " Hickory, Brass Capped Ends, Polished		" "	4 50

FREIGHT STICKS.

5 Feet Long, with Brass Hook		Per Dozen, $18 00

Box Chisels.

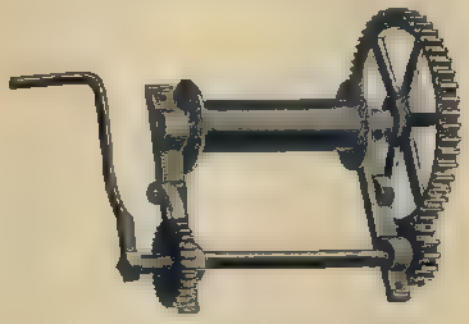
Solid Cast Steel . . Per Dozen, $9 00

Buttresses.

Cast Steel . Per Dozen, $20 00

Coopers' Tools.

Iron Geared Windlass.



Weight 110 Pounds

Is Beyond Doubt the Best Windlass in the Market.

THIS IMPROVED ALL IRON GEARED WINDLASS needs no word of praise as to its excelling all. Works easiest on heavy work; is saving on man, staves and rope; is right or left handed; can be placed in any desired position in shop. The same machine is also adaptable and extensively used by Butchers in slaughter houses, also in stores or warehouses for hoisting purposes, etc. Will raise 4 or 5 tons weight.

Price, with Crank . . $15 00

Coopers' Socket Drivers.

Handled . . Each, $1 25

Coopers' Short and Oval Drivers.

Each . $1 00

Coopers' Nantucket Drivers.

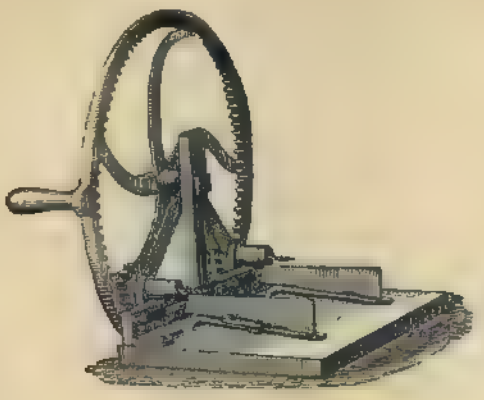
Each $0 75

Coopers' Hickory Drivers.

Each . $0 25

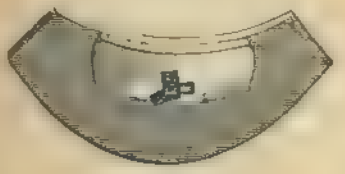
Coopers' Tools.

Merchants' Patent Doweling Machine.



Each $6 50

V Howels.

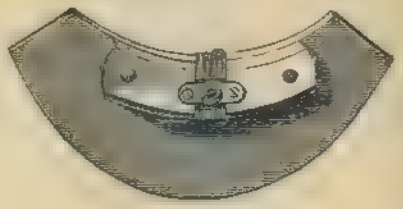


Beech . . . Each, $1 25

Tight Barrel Howels.

Each $1 75

Tight Barrel Crozes.



Each $1 25

Coopers' Jointers.

Double Irons, 4½ Feet . . . . . Each, $2 50

Coopers' Levelers.

Beech . . . . Each, $1 00

Coopers' Flagging Irons.

Each $0 75

Coopers' Vises.

Each . . . $0 25

Coopers' Beakhorns.

CAST STEEL FACE.

Per Pound $0 30

Coopers' Tools.

"Barton's" Coopers' Froes.

Inches,	10	12	14	16
Per Doz.,	$15 00	18 00	21 00	24 00

Coopers' Scrapers.

Each . $0 75

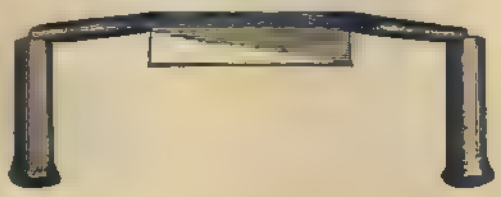
"Barton's" Coopers' Shaves.

Stave Shaves.

7 Inches . Each, $1 25

8 Inches . Each, $1 50

Backing Shaves.



7 Inches Each, $1 25

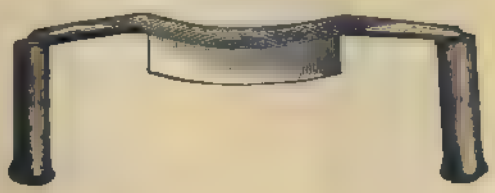
8 " " 1 50

Heading Shaves.

10 Inches Each, $1 75

12 " " 2 00

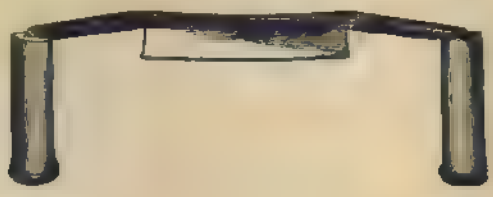
Hollowing Shaves.



7 Inches Each, $1 25

8 " 1 50

Hoop and Paring Shaves.



7 inches Each, $1 25

8 " " 1 50

Coopers' Inshaves.

One Handle Each, $1 00

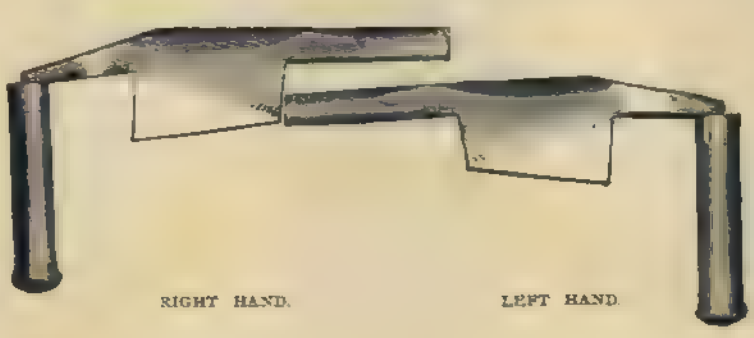
Two " 1 25

Coopers' Spokeshaves.

Improved or Cleveland Pattern . . Each, $1 50

Double Iron, Wood Handle Each, $1 50

Coopers' Champer Knives.



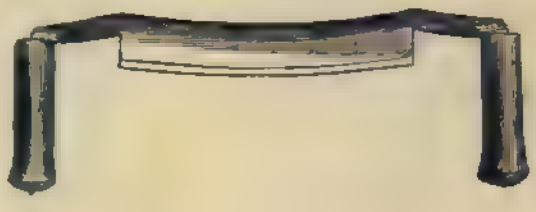
RIGHT HAND. LEFT HAND.

Blade, 4 Inch	Each, $1 50
" 5 "	1 75
" 6 "	"

"Barton's" Drawing Knives.

Narrow Carriage.

'Shingling.



Carpenters'.

Carpenters'.

Inch,	6	7	8	9	10	11	12	13	14	16
Per Dozen,	$10 00	11 00	12 00	13 00	14 00	15 00	16 00	17 00	18 00	20 00

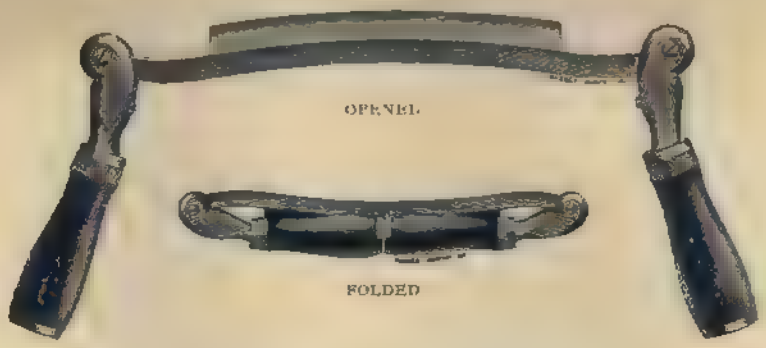
Narrow Carriage.

Inch,	6	7	8	9	10	12	14
Per Dozen,	$11 00	12 00	13 00	14 00	15 00	17 00	19 00

Shingling Knives.

Inch,	10	12	14	16
Per Dozen,	$16 00	18 00	20 00	22 00

The Folding Handle Draw-Knife.

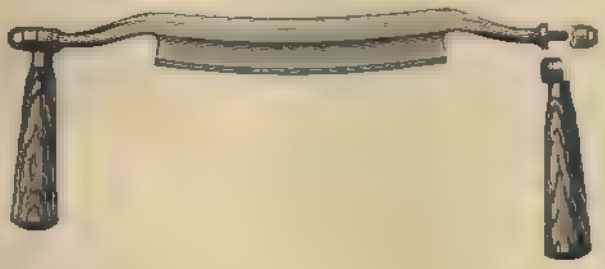


EVERY BLADE WARRANTED.

Numbers.	Length of Blade.	Width of Blade.	Size when Folded.	Per Dozen
1	6 Inch.	1⅝ Inch.	11⅛ Inch x 2 Inch.	$21 00
2	7 "	1⅝ "	12¾ " x 2 "	22 50
3	8 "	1⅝ "	14 " x 2 "	24 00

Carpenters' Drawing Knives.

ADJUSTABLE HANDLES.



Inch,	8	10
Per Dozen,	$12 00	15 00

Scroll Knives.

Narrow, Beveled on Both Sides.

Inch,	8	10
Per Dozen,	$12 00	15 00

"Witherby's" Drawing Knives.

No. 1.

Inch,	6	7	8	9	10	12	13	14	15	16
Per Dozen	$16 00	17 00	18 00	19 00	20 00	22 00	24 00	25 00	26 00	28 00

"Goodell's" Spokeshave.

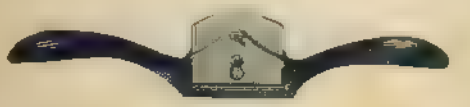
The circular shape of this tool enables it to work in smaller circles than other Shaves.

The angle of the knife is such that it cuts instead of scraping the grain of the wood. Either handle can be removed to work in cramped places.

Price . . . . . Per Dozen, $9 00

"Bailey's" Iron Spokeshaves.

The Spokeshaves in the following List are superior in style, quality and finish to any in market. The Cutters are made of the best English Cast Steel, tempered and ground by an improved method, and are in perfect working order when sent from the factory.



No. **51.** Double Iron, Raised Handle, 10 In., 2⅛ In. Cutter
Per Dozen, $3 50

No. **52.** Double Iron, Straight Handle, 10 In., 2⅛ In. Cutter.
Per Dozen, $3 50

No. **53.** Adjustable, Raised Handle, 10 In. 2⅛ In Cutter
Per Dozen, $4 50

No. **54.** Adjustable, Straight Handle, 10 In., 2⅛ In. Cutter.
Per Dozen, $4 50

No. **55.** Model Double Iron, Hollow Face, 10 In., 2⅛ In. Cutter.
Per Dozen, $3 00

No. **58.** Model Double Iron, 10 Inch, 2⅛ Inch Cutter.
Per Dozen, $3 00

No. **59.** Single Iron (Pattern of No. 56), 10 In., 2⅛ In Cutter.
Per Dozen, $3 50

No. **60.** Double Cutter, Hollow and Straight, 10 Inch, 1½ Inch Cutters . Per Dozen, $4 50

Patent Reversible Spokeshave.

This Spokeshave can be worked to and from the person using it without changing position

No. **62.** Raised Handle (Heavy), Double Cutter, 10 Inch, 2⅛ Inch Cutter . . . Per Dozen, $6 00

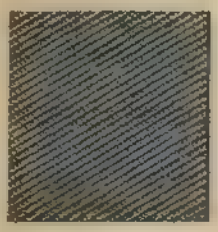
Wood Spokeshaves.

Size, Inch,	2½	3	3½
Beech, Plain, per Dozen	$3 25	3 75	4 25

Screw-Iron Spokeshaves.

Size, Inch,	2½	3	3½
Beech, Plated, per Dozen,	$9 10	9 50	10 00

Files and Rasps.



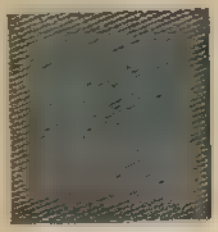
Bastard.

NOTICE.

For Castings, Wrought Iron, Brass, Composition Metals and like material order **Bastard Cut.**

Mill Saw Bastard

For Steel and Part Finish to Iron Work, order **Second Cut.**



Second Cut.

For Finishing to a Good Surface, order **Smooth Cut.**

For an Extra Finish, order **Dead Smooth.**

Wood Rasp

For Finishing Work—after Bastard use **Second Cut,** after Second Cut **Smooth** or **Dead Smooth.**

Smooth.

It is always to Consumers advantage to Order special cuts for special work

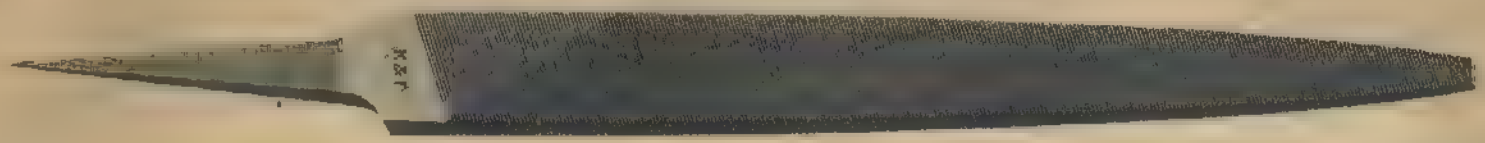
See Additional Illustrations on Pages 537, 538, 539 and 540

Horse Rasp

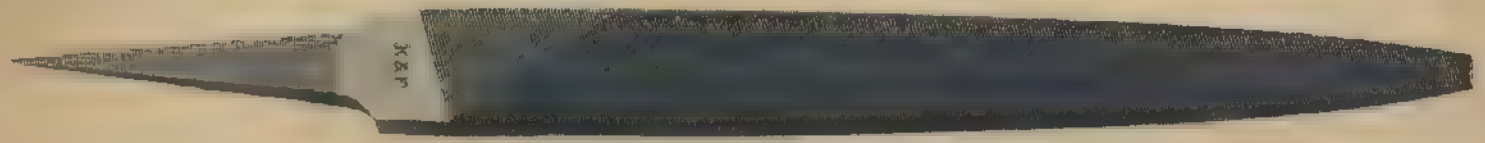
SEE PRICE LIST ON PAGE 541

Should a File be Defective, by taking it to the Parties from whom Purchased, a Perfect one will be Given in Exchange, Free of Charge.

Flat Bastard 6in. №1

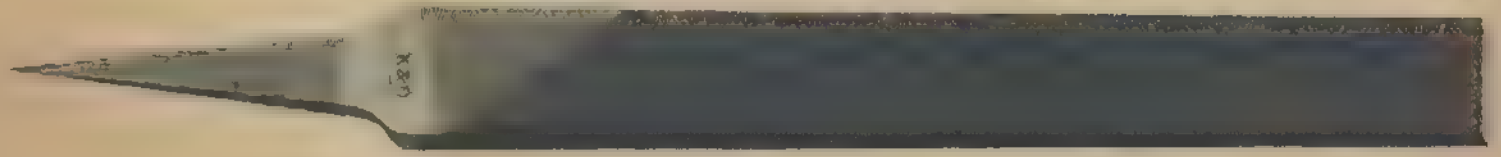


Flat 2nd Cut 6in. №2



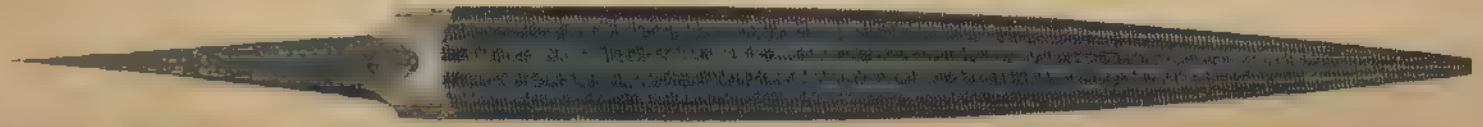
Hand Smooth 6in. №3

Hand Dead Smooth 6in. №4

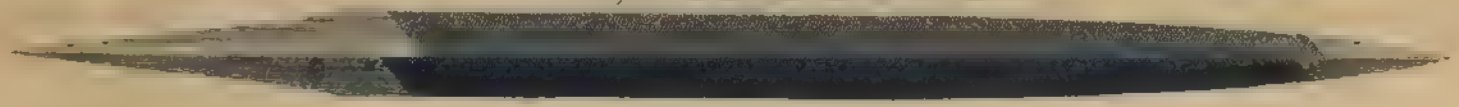


Round Bastard 6in. №5

Halfround Bastard 6in. №6



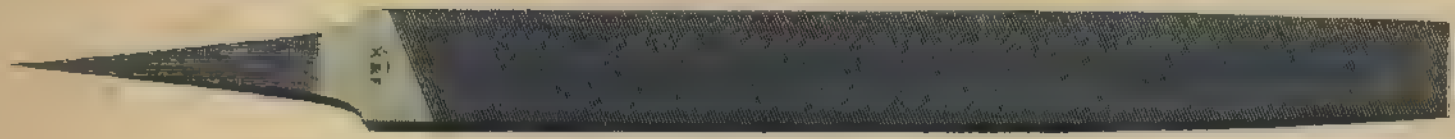
Taper Saw File 6 in. No 7



Band Saw Taper File 6 in. No 8

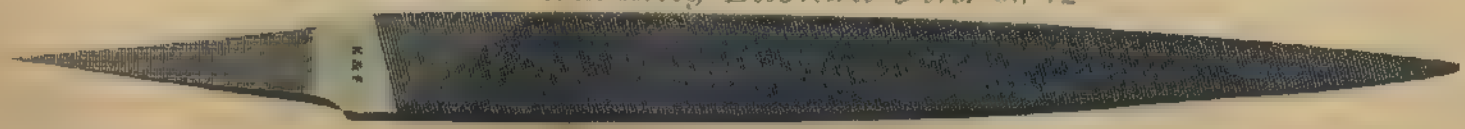
Slim Taper Saw File 6 in. No 9

Mill Bastard 6 in. No 10



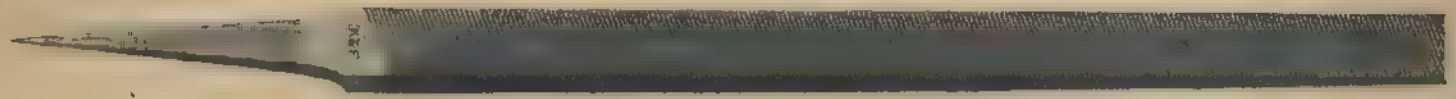
3 Square Bastard 6 in. No 11

Warding Bastard 6 in. No 12

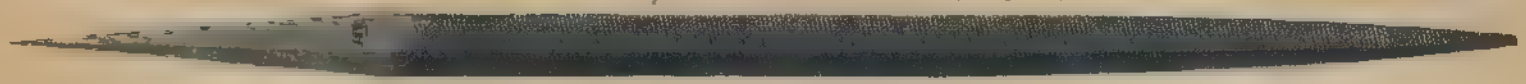


Equaling Bastard 6 in. № 13

Pillar Bastard 6 in. № 14

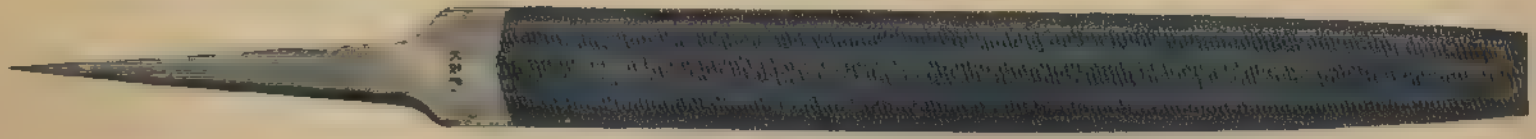


Square Bastard 6 in. № 15

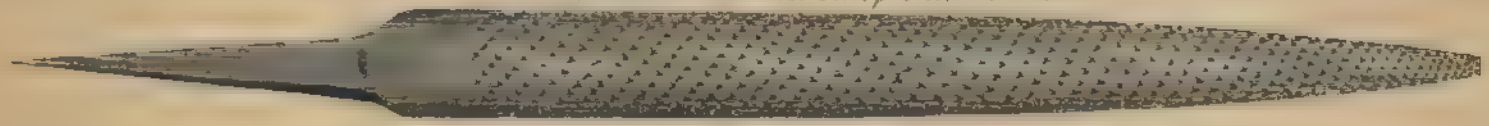


Crossing Bastard 6 in. № 16

Cabinet File 6 in. № 17

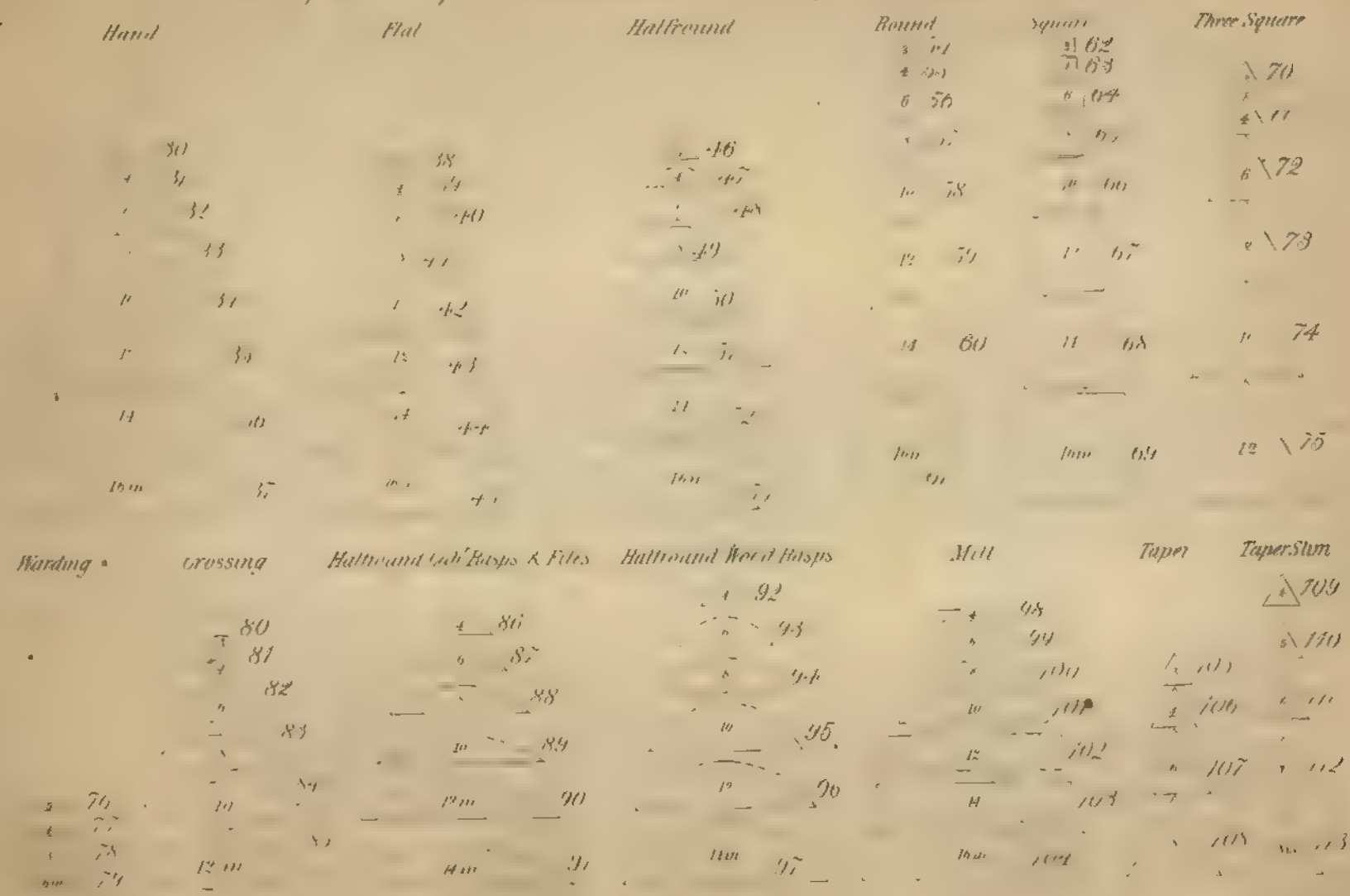


Hallamond Wood Rasp 6 in № 18



Cabinet Rasp 6 in. № 19

Diagrams of Standard Sizes of Regular Files



Kearney & Foot Co.,

Files and Rasps.

For Illustrations, see Pages 536 to 540

BASTARD.	4 In.	5	6	7	8	9	10	11	12	13	14	15	16	18	20
Mill Saw, and Round	$1 80	2 00	2 25	2 55	2 90	3 30	3 80	4 50	5 40	6 50	7 80	9 30	11 00	15 10	20 40
Mill Saw, One Round Edge	1 94	2 15	2 42	2 74	3 12	3 55	4 09	4 84	5 81	6 99	8 39	10 00	11 83	16 23	21 93
Flat and Square	2 00	2 20	2 50	2 90	3 40	4 00	4 70	5 60	6 70	8 00	9 50	11 20	13 10	17 65	23 20
Hand	2 25	2 50	2 80	3 20	3 70	4 35	5 20	6 30	7 50	8 90	10 50	12 30	14 30	19 20	25 30
Half Round	2 50	2 80	3 20	3 70	4 30	5 00	5 80	6 70	7 80	9 10	10 60	12 40	14 50	19 60	26 00
SECOND CUT.															
Mill Saw and Round	2 15	2 40	2 65	3 00	3 40	3 85	4 40	5 20	6 20	7 45	8 90	10 60	12 50	16 90	22 85
Flat and Square	2 40	2 60	2 95	3 40	4 00	4 70	5 45	6 50	7 70	9 15	10 90	12 75	14 85	19 75	26 00
Hand	2 70	3 00	3 30	3 75	4 35	5 10	6 00	7 30	8 60	10 20	12 00	14 00	16 20	21 50	28 35
Half Round	3 00	3 35	3 80	4 35	5 00	5 85	6 75	7 75	9 00	10 40	12 10	14 15	16 50	22 00	29 10
SMOOTH.															
Round	2 40	2 65	2 95	3 30	3 70	4 20	4 80	5 65	6 75	8 05	9 65	11 45	13 40	18 10	24 50
Flat and Square	2 65	2 90	3 25	3 75	4 35	5 10	5 90	7 05	8 40	10 00	11 80	13 75	16 00	21 20	27 85
Hand	3 00	3 30	3 65	4 15	4 75	5 55	6 55	7 95	9 40	11 00	13 00	15 10	17 50	23 00	30 35
Half Round	3 30	3 70	4 15	4 80	5 50	6 40	7 30	8 45	9 75	11 25	13 10	15 25	17 70	23 50	31 20
RASPS.															
Cabinet Files	...	...	4 20	5 00	6 10	7 30	8 75	10 40	12 30	14 50	16 90	19 60	22 50		
Cabinet Rasps			6 00	7 00	8 20	9 60	11 20	13 00	15 00	17 20	19 60	22 20	25 00		
Flat & Half Round Wood Rasps			4 20	5 00	6 10	7 30	8 75	10 40	12 30	14 50	16 90	19 60	22 50		
Farriers' or Horse	...	...	...	...	...	...	6 50	7 50	9 00	10 70	12 70	15 00	17 60	23 70	...
Tanged Horse	...	...	...	...	...	...	9 00	10 25	12 00	14 00	16 50	19 50	23 00	...	
Shoemakers' Rasps, Flat			4 60	5 30	6 10	7 00	8 00	9 10	10 30	11 60	13 00				

SAW FILES.	3 In	3	4	4½	5	5½	6	7	8	9	10	11	12	13	14
Tapers Slim Single Cut	$1 20	1 20	1 30	1 45	1 70	1 90	2 10	2 50	3 00	3 70	4 50	5 50	6 80	8 30	10 00
Tapers Regular Single Cut	1 10	1 10	1 20	1 40	1 70	2 00	2 40	3 00	3 80	4 60	5 70	7 20	9 00	11 00	13 20
Tapers Double Cut to Point and Band Saw	1 60	1 60	1 75	2 00	2 40	2 75	3 25	4 00	4 95	5 90	7 10	8 80	10 80	12 90	15 20
Pit Saw Single Cut	2 10	2 10	2 20	2 30	2 50	2 80	3 20	3 70	4 30	5 00	5 80	6 70	7 70		

Tuyere Irons.

"DUCK'S" NEST.

Size	20	B
Weight, Lbs	14	16
Each	$1 00	1 25

"CLARK'S" PATENT.

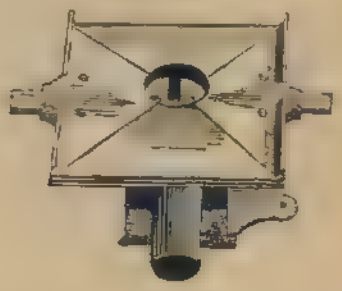
Size,	1	2	3	4
Weight, Lbs,	16	20	30	40
Each,	$2 00	2 50	3 00	5 00

"BODIE."

With Two Sizes of Grates.

Weight, 24 Lbs . . . . . Each, $4 00

"PACIFIC."



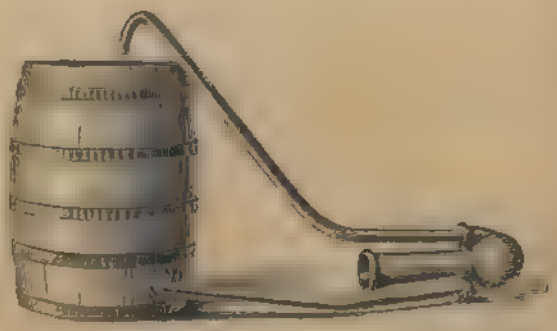
Either right or left hand, with Round or Triangular Ball

Weight, 50 Lbs . . . . . Each, $5 00

"CALIFORNIA" WATER.

No.	1	2
Length, Inch	12	16
Weight, Lbs	40	65
Each	$4 00	6 00

"DOLES" PATENT WATER.



Weight, with Pipes, 25 lbs . . Each, $6 00

Forge Backs and Tubes.

LIGHT.

Weight 22 Pounds . . . Each, $3 00

Tube only, $1 00

HEAVY.

Weight 56 Pounds . . . . . Each, $4 50

Tube only, $1 00

Bellows.

"CALIFORNIA" PATENT NOZZLE.

HAND.

Blacksmiths' Bellows.

Size, Inch,	24	26	28	30	32	34	36	38	40
Each,	$12 00	13 00	14 00	15 00	16 00	17 00	19 00	21 00	22 50

"California" Patent Nozzle Bellows.

Heavy.

Size, Inch,	30	32	34	36	38	40
Each,	$15 00	16 00	17 00	19 00	21 00	22 50

Extra Heavy. Iron Braced.

Size, Inch,	36	38	40	42	44	46	48
Each,	$27 00	28 00	30 00	31 50	44 00	57 50	72 00

Hand Bellows.

Size, Diameter, Inch,	6	7	8
Per Dozen	$5 00	5 50	6 00

Moulders' Bellows.

Size, Diameter, Inch,	10	12	14
Per Dozen,	$17 00	24 00	28 00

Prospectors' Forges.

No. 7.

Height 15 Inches. Hearth 15 Inches Diameter. Fan 5 Inches.

Weight, 40 Pounds.

Price $16 00

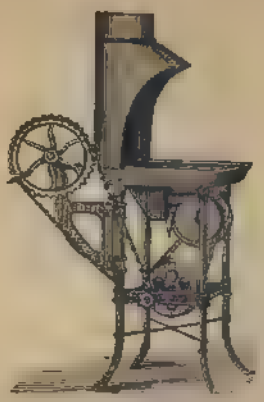
No. 8.

Height, 15 Inches. Hearth, 15 Inches Diameter. Fan, 6 Inches.

Weight, 50 Pounds.

Price $18 00

"Keystone" Portable Forges.



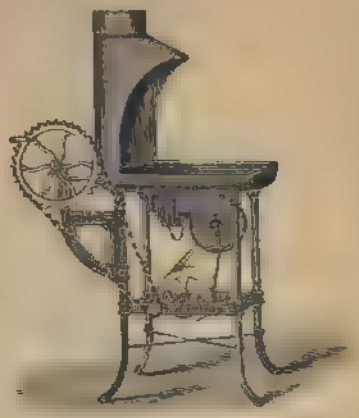
FORGE No. 1, WITH HOOD.

Height, 30 Inches; Fire Pan, 17x20 Inches; Fan, 6 Inches; Weight, 88 Pounds.

This Forge will produce a quick welding heat on iron 1 inch diameter. Heavier work can be done on it.

It is used by tank builders, miners, boiler makers, etc Being light and strong and compact it is easily carried about.

Price $25 00



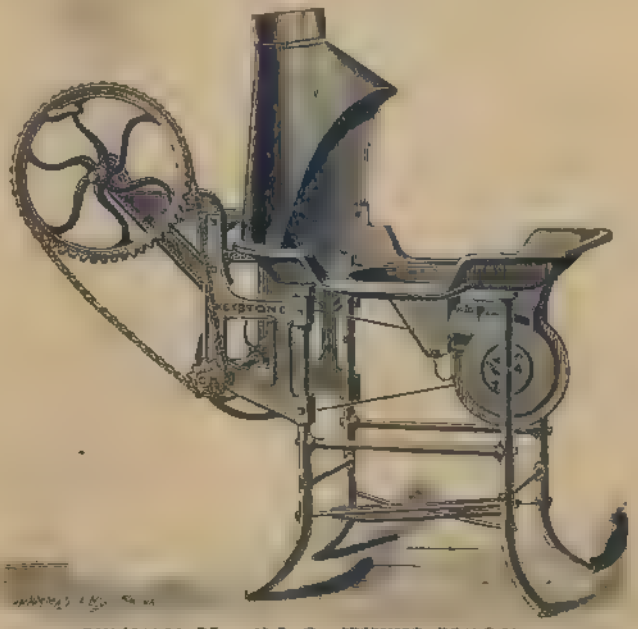
FORGE No. 2, WITH HOOD.

Height 30 Inches Fire Pan, 20x24 Inches; Fan, 8 Inches; Weight, 104 Pounds.

This Forge will produce a quick welding heat on iron 1½ inch diameter. Heavier work can be done on it

It is used by boiler makers bridge builders, on board ships, contractors etc

Price $35 00



FORGE No. 2 1/2, WITH HOOD.

Height, 25 Inches; Fire Pan, 21x27 Inches; Fan, 10 Inches; Weight, 150 Pounds.

This Forge will produce a quick welding heat on iron 2 inches in diameter and on heavier iron if required.

It is used for all kinds of tool work, machinists, marble works, millers, and repairs for manufacturers in general.

Price $40 00

FORGE No. 3, WITH HOOD.

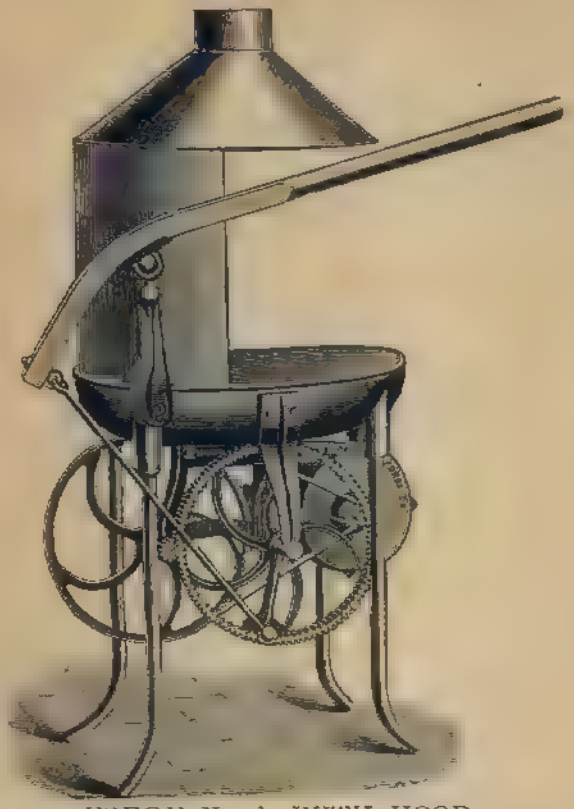
Style of No. 2½, only larger)

Height, 25 Inches; Fire Pan, 24x30 Inches; Fan, 12 Inches; Weight, 160 Pounds.

This Forge will produce a quick welding heat on iron 3 inches in diameter, or on heavier iron if desired. It has the latest improved Revolving Ball Tuyere.

Price . $50 00

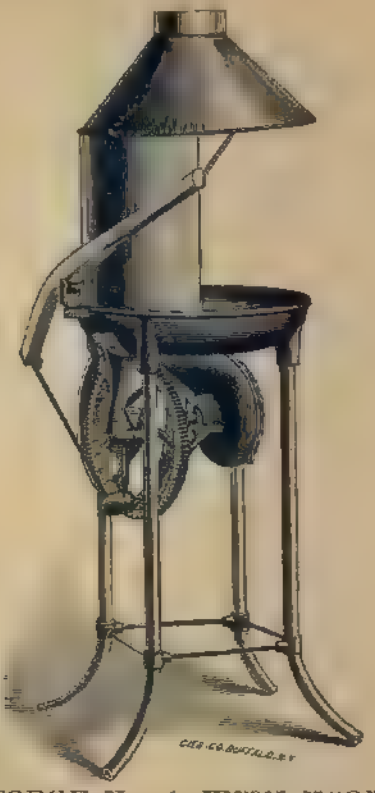
"Buffalo" Portable Forges.



FORGE No. 1, WITH HOOD.

Height, 29 Inches, Fan, 10 Inches Hearth, 21 x 27 Inches, Weight, 140 Pounds.

Price $40 00



FORGE No. 4, WITH HOOD.

Half Open Hood, Height, 31 Inches; Size of Hearth, 18 Inches Diameter; Weight, 75 Pounds.

Price $27 00

FORGE No. 3.

Height, 29 Inches; Fan, 10 Inches, Hearth, 21 x 27 Inches, Weight, 130 Pounds.

Price $36 00

FORGE No. 5.

Height, 33 Inches; Size of Hearth, 18 Inches Diameter; Weight, 70 Pounds.

Price $24 00

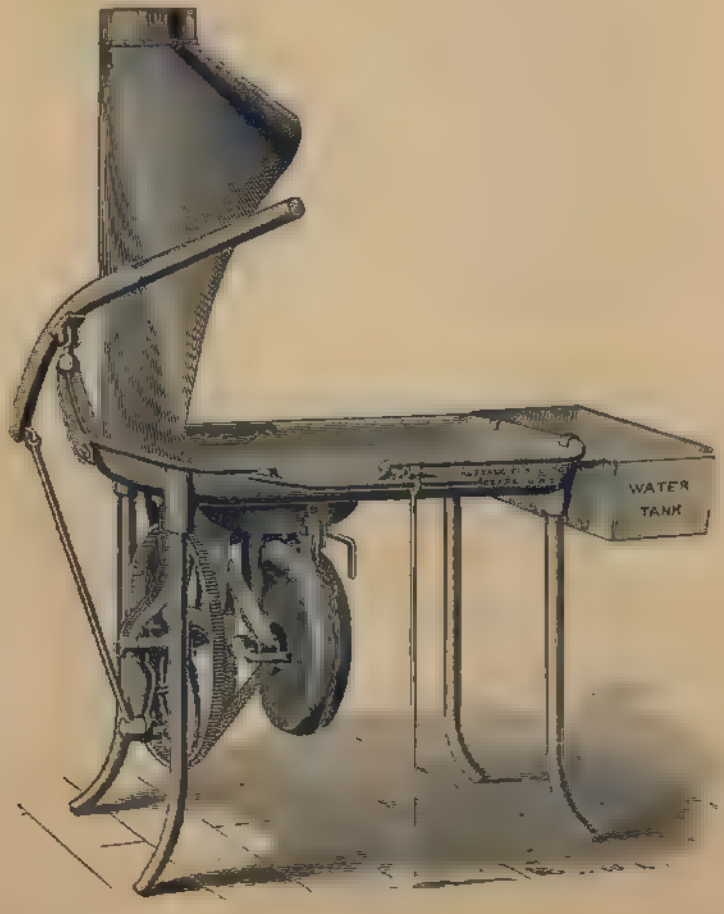
"Buffalo" Blowers.

They are especially intended for blowing fires in portable and small stationary boilers, experimenting, and various purposes where a small current of air is desired. Also, for forge fires; No. 00 giving blast for one fire; No. 0 will blow two fires, and No. ½ will furnish sufficient blast for four fires.

Blower No. **00**, 8 Inch, . **$8 00** | Blower No. **0**, 12 Inch, . **$10 00** | Blower No. **½**, 18 Inch, . **$14 00**

Arranged for Exhausting Purposes, **$2 00** Extra.

"Buffalo" Portable Forge.

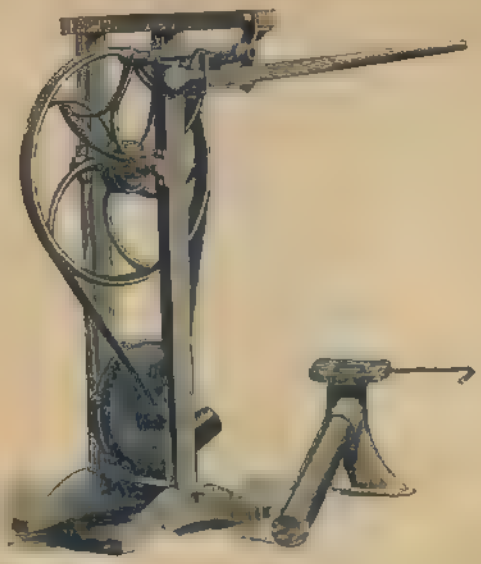


FORGE No. 0.

Height, 30 Inches, Size of Hearth, 28 x 40 Inches Fan, 14 Inches Weight, 250 Pounds—with Water Tank, 300 Pounds.

Without Water Tank . . . . . **$50 00** | With Water Tank **$54 00**

"Buffalo" Blowers.



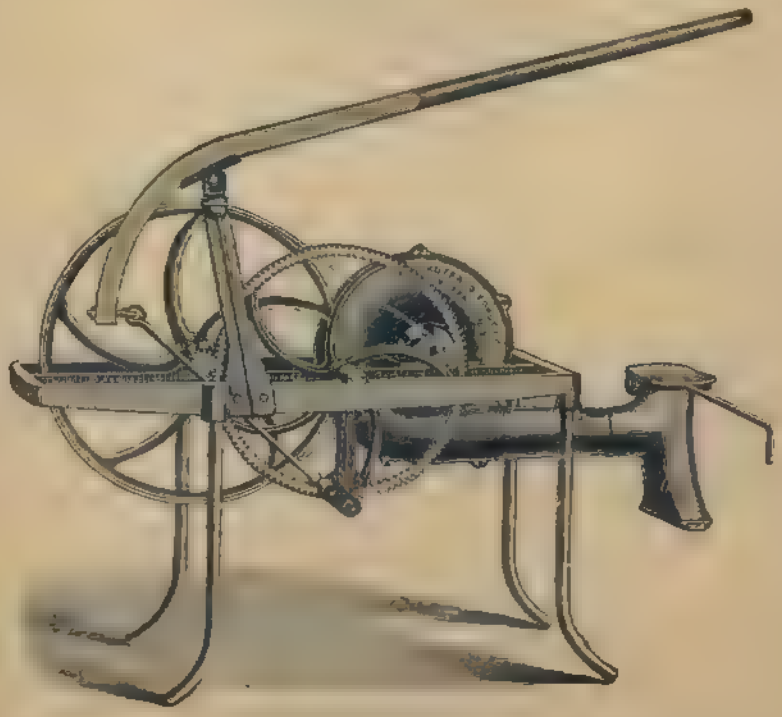
UPRIGHT BLOWER No. 3. Adapted for Use of Blacksmiths in General.

MADE RIGHT OR LEFT-HAND.

The above cut represents Right-Hand Blower

Size of Fan, 14 Inches; Weight, 110 Pounds, with Tuyere, 130 Pounds.

Complete with Tuyere . . . Price, $25 00 | Without Tuyere . . . . Price, $23 00



BLOWER No. 4.

Size of Fan, 17 Inches; Height, 35 Inches; Length, 35 Inches; Weight, 225 Pounds.

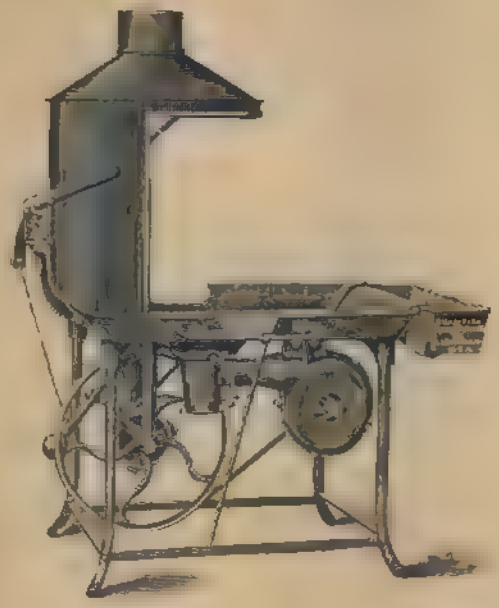
Complete with Tuyere . . . Price, $36 00 | Without Tuyere . . . . Price, $34 00

BLOWER No. 2.

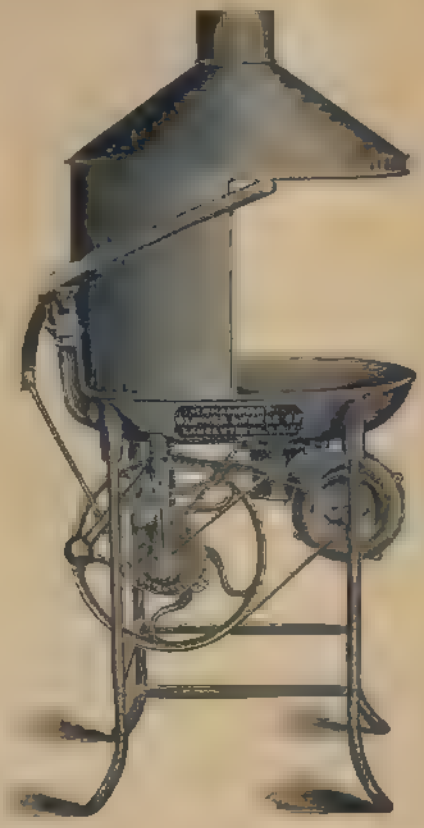
Size of Fan, 14 Inches; Height, 35 Inches; Length, 32 Inches; Weight, 130 Pounds, with Tuyere 150 Pounds.

Complete with Tuyere . . . Price, $32 00 | Without Tuyere . . . . Price, $30 00

"Champion" Portable Forges.



FORGE No. 1, WITH HALF HOOD.



FORGE No. 3, WITH HALF HOOD.

Prices and Description.

No. 1. Large Size Champion Blacksmiths' Portable Forge. Fan 14 Inches, Hearth 28 x 40, Height 30 Inches; Weight 250 Pounds.

With Water Tank. Weight 265 Pounds.

This Forge is adapted for heavy Carriage and Blacksmith work, it having a large Hearth and sufficient blast to do the heaviest kind of work. It will heat 4 inch iron to a welding heat in ten minutes. Blacksmiths will find the Champion a great improvement over the old-fashioned bellows and brick forges.

Price, without Water Tank . . $50 00
" with " " . . 55 00

No. 2. Champion Boilermakers' Forge with Shield, Fan 10 Inches; Hearth 21 x 27 Inches; Height 30 Inches; Weight 120 Pounds.

This Forge is especially intended for Boilermakers, Iron Bridge and Ship Builders, Railroad Contractors, Miners, Tank Builders, etc

Price $36 00

No. 3. Champion Machinists' Forge, Half Hood, Fan 10 Inches; Hearth 21 x 27 Inches; Height 30 Inches; Weight 130 Pounds.

Machinists, Plumbers, Miners, Marble Works, Millwrights, Railroad Repair Shops, Locksmiths, Planters and Manufacturers in general, find the No. 3 Forge very convenient and economical, and "just the thing" for their purposes.

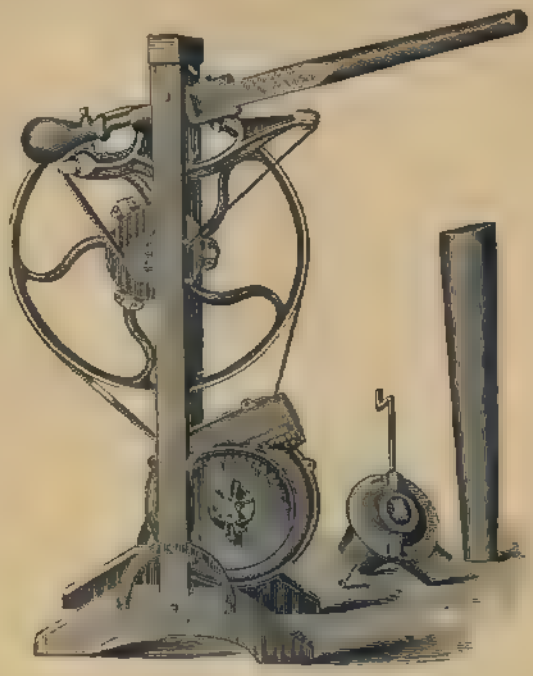
Price $40 00

No. 4. Champion Machinists' Forge, Closed Hood, Fan 10 Inches, Hearth 21 x 27 Inches, Height 30 Inches; Weight 140 Pounds.

A closed hood is placed on No. 4 Forge which has 2 doors —one in front and one in the rear—thus preventing the escape of sparks, fumes or smoke, and is used in Furniture Factories, Saw and Planing Mills, Oil Refineries, Cotton Mills, Jewelers, Dentists, Varnish Works, etc.

Price $42 00

"Champion" Lever Blowers.

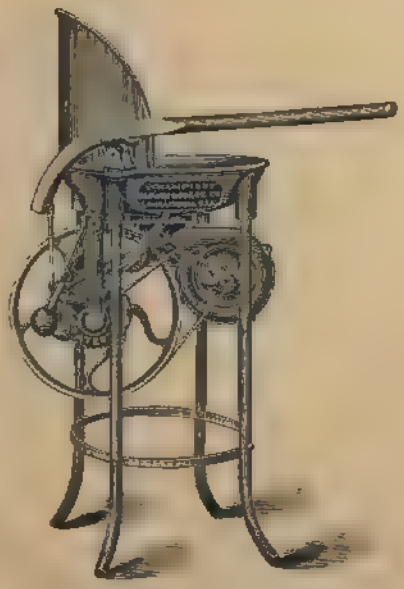


The Light Running Champion Blower works with Swivel Lever.

No. 4. Fan Blower, 14 Inch Case, 22 Inch Fly Wheel; for General Blacksmith Use $18 00

Complete with Tuyere $20 00

"Champion" Portable Forges.



Forge No. 5 with Shield.

Works with Swivel Lever as represented in the above cut.

No. 5. Champion Rivet Forge with Shield, Height 33 Inch, Hearth 18 Inch Diameter, Weight 80 Lbs.

Price $24 00

Forge No. 5 is adapted for use of Tank builders, Elevated Railroad builders, Miners and Prospectors, making repairs on Boilers, Bridges, etc. It is easily carried about the country, being light, strong and compact.

No. 6. Champion Toolmakers' Forge, Half Hood, Height 33 Inch, Hearth 18 Inch Diameter, Weight 85 Lbs.

Price $27 00

Forge No. 6 is very convenient for Small Hardware manufacturers for heating and tempering tools of all kinds. They are also used by Jewelers, Tinsmiths, Plumbers, Tool Makers, etc.

No 7. Champion Jewelers' Forge, Enclosed Hood, Height 33 Inch, Hearth 18 Inch Diameter, Weight 80 Lbs.

Price $30 00

Forge No. 7 has a closed Hood, with door in front and a small slide in the rear, and is used for tempering tools in Factories where combustible material is used, and also by Jewelers, Locksmiths, Cabinetmakers, Pattern and Model makers, Farmers, etc.

Lever and Pull Door Bells.

PLAIN BELL.

Full Size Cut of Nos. 3½ and 13½. Patented.

FANCY BELL.

Full Size Cut of Nos. 203½, 213½ and 243½. Patented.

PLAIN BELLS.

Bell Metal.

No. **3½.** 3½ Inch . . Per Dozen, $15 00
No. **5.** 5 " . . . " " 21 50

Nickel-Plated.

No. **13½.** 3½ Inch . . Per Dozen, $18 50
No. **15.** 5 " . . . " " 26 00

FANCY BELLS.

Bell Metal.

No. **203½.** 3½ Inch . . . . . Per Dozen, $15 00
No. **205.** 5 " . . . . . " " 21 50

Nickel-Plated.

No. **213½.** 3½ Inch . . . . . Per Dozen, $18 50
No. **215.** 5 " . . . . . " " 26 00

Berlin Bronzed.

No. **243½.** 3½ Inch . . . . . Per Dozen, $10 00

All the above Bells packed with Screws.

Levers for Door Bells.

Full Size Cut of No. 401. Patented.

Full Size Cut of No. 806. Patented.

PACKED WITH SCREWS.

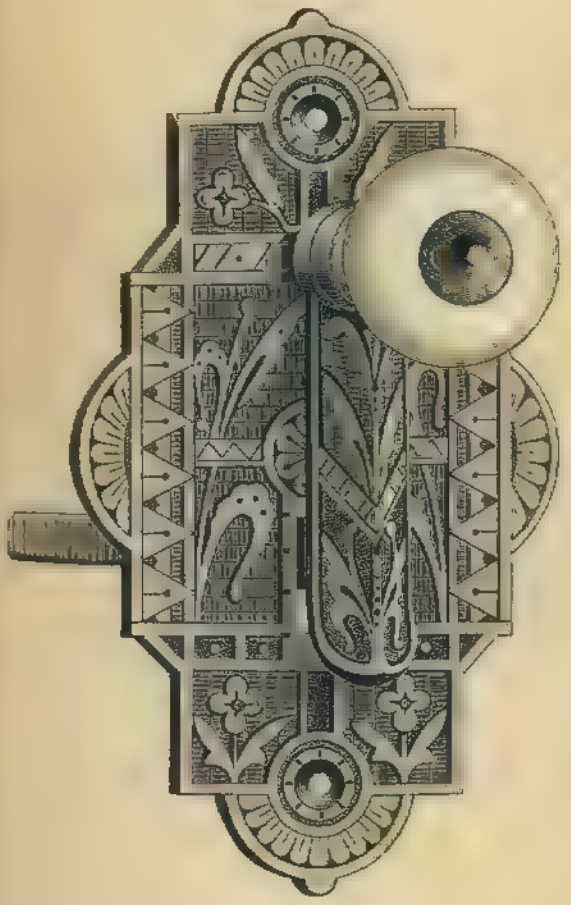
Berlin Bronzed.

No. **401.** With Porcelain Knob . . . . . Per Dozen, $4 40

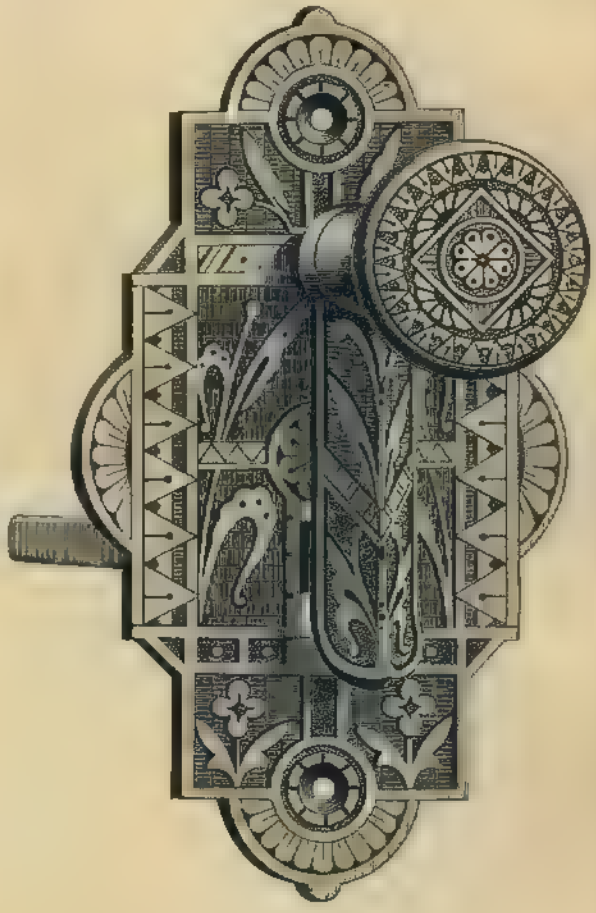
Bronze Metal.

No. **806.** With Fancy Bronze Metal Knob . . . . . Per Dozen, $11 75

Levers for Door Bells.



Full Size Cut of No. 404. Patented.



Full Size Cut of Nos. 804 and 904. Patented.

PACKED WITH SCREWS.

Berlin Bronzed.

No. **404.** With Porcelain Knob . . . . . Per Dozen, $5 00

Bronze Metal.

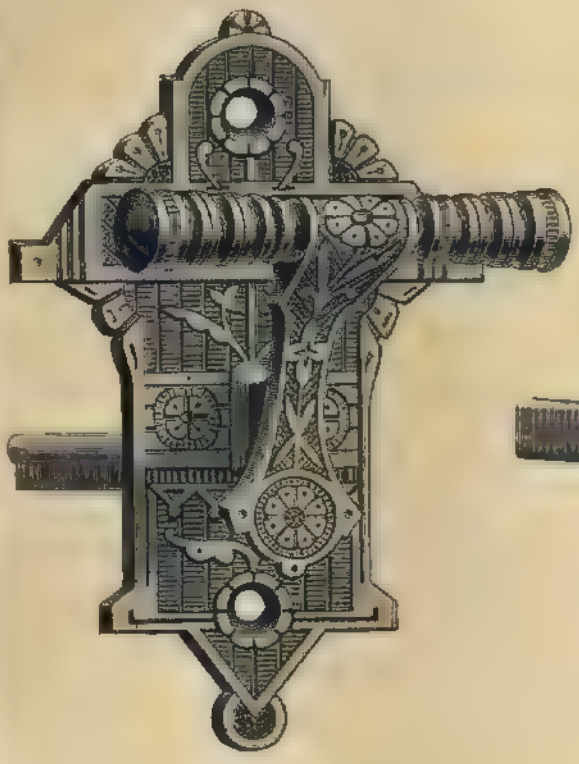
No. **804.** With Fancy Bronze Metal Knob . . . . . Per Dozen, $15 00

*"Imperial" Bronze.

No. **904.** With Fancy Imperial Bronze Knob . . . . . Per Dozen, $15 00

*"Imperial."—Raised Surface in Polished Natural Bronze Color, with Black Background.

Levers for Door Bells.



Full Size Cut of Nos. 402, 802 and 902.

Full Size Cut of Nos. 405 and 805.

PACKED WITH SCREWS.

Berlin Bronzed.

No. **402.** With Fancy T Handle . . . . . Per Dozen, $3 00

No. **405.** " " " " . . . . . " " 4 00

Bronze Metal.

No. **802.** With Fancy Bronze Metal T Handle . . . . . Per Dozen, $10 00

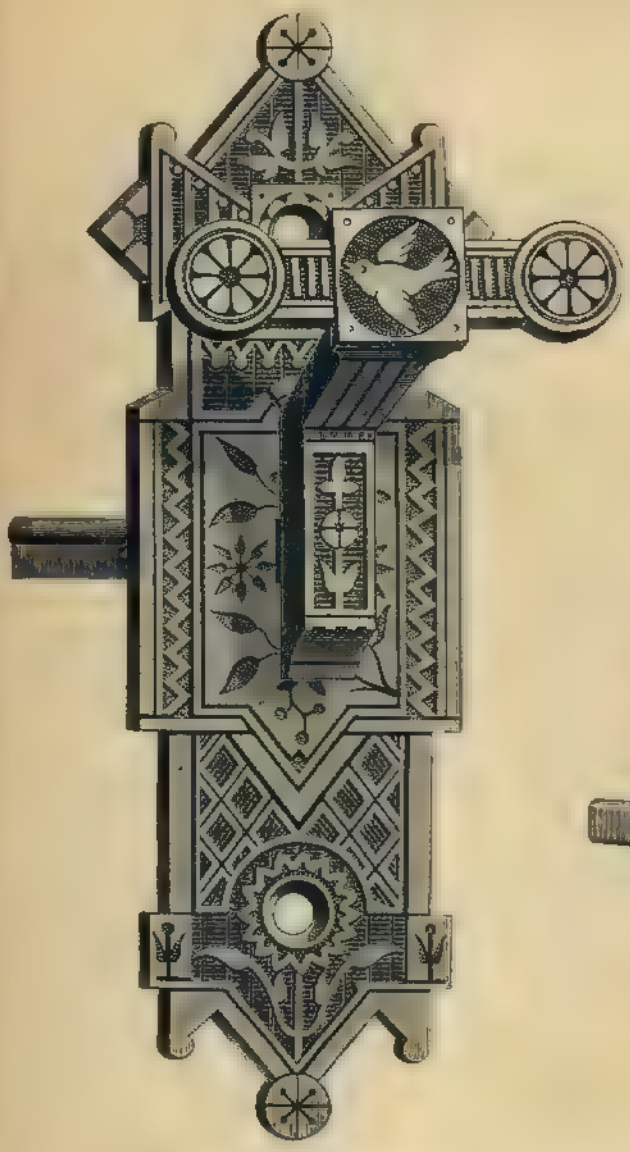
No. **805.** " " " " " " . . . . . " " $15 00

*"Imperial" Bronze.

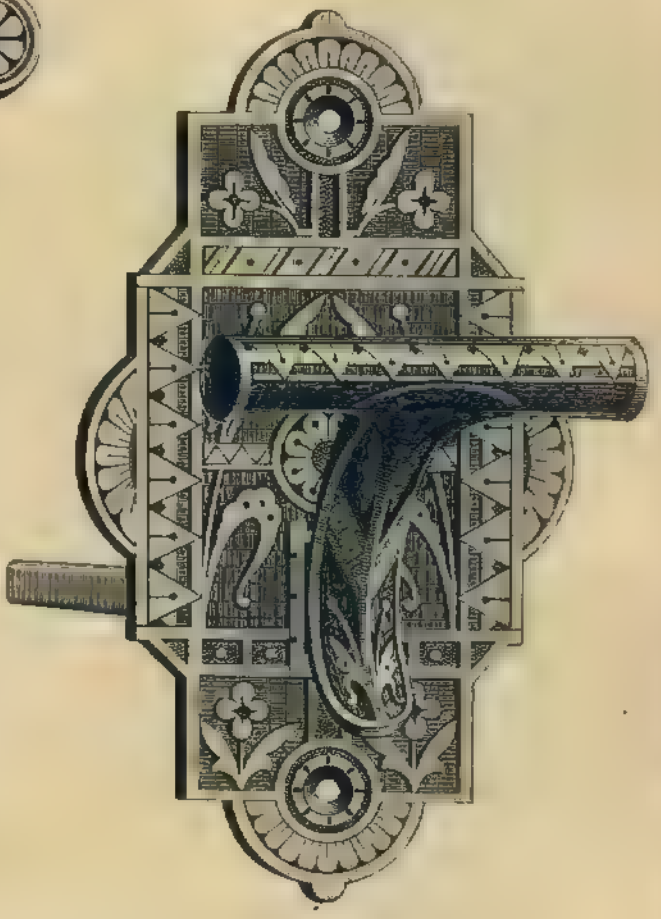
No. **902.** With Fancy Imperial Bronze T Handle . . . . . Per Dozen, $10 00

*"Imperial."—Raised Surface in Polished Natural Bronze Color, with Black Background.

Levers for Door Bells.



Full Size Cut of No. 415. Patented



Full Size Cut of Nos. 403, 803 and 903. Patented

PACKED WITH SCREWS.

Berlin Bronzed.

No. **403.** With Fancy T Handle . . . . . Per Dozen, $3 40
No. **415.** " " " " . . . . . " " 4 50

Bronze Metal.

No. **803.** With Fancy Bronze Metal T Handle . . . . . Per Dozen, $13 00

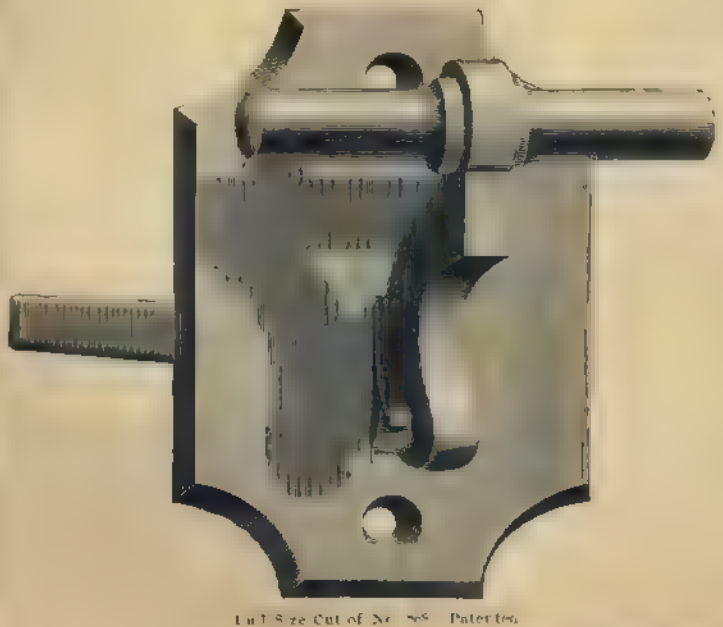
*"Imperial" Bronze.

No. **903.** With Fancy Imperial Bronze T Handle . . . . . Per Dozen, $13 00

*"Imperial."—Raised Surface in Polished Natural Bronze Color, with Black Background.

Levers for Door Bells.

Full Size Cut of Nos. 633 and 80[illegible] Patented



Full Size Cut of No. 708 Patented

PACKED WITH SCREWS.

Silver-Plated.

No. **609.** Silver-Plated on Cast Brass, Fancy T Handle — Per Dozen, $16 00

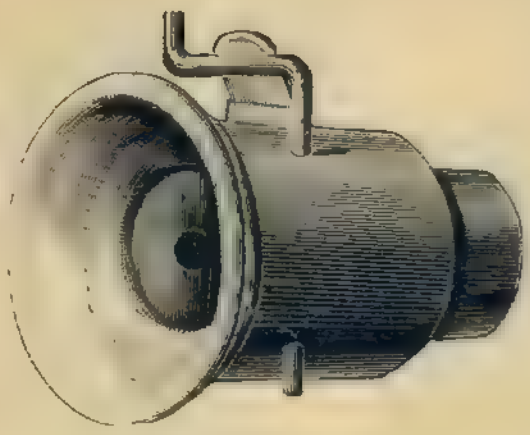
Nickel-Plated.

No. **708.** Nickel-Plated on Cast Brass, Plain T Handle — Per Dozen, $16 25

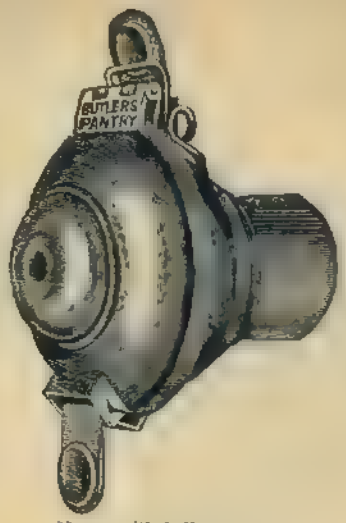
Bronze Metal.

No. **809.** With Fancy Bronze Metal T Handle — Per Dozen, $16 00

Alarm Whistles.



No. 158 (New)



No. 21. with Indicator

Porcelain Mouth Piece, Japanned Body.

No. 158. With Indicator . Per Dozen, $4 50 | **No. 159.** Without Indicator . Per Dozen, $4 00

Brass, Nickel-Plated.

No. 21. With Indicator . Per Dozen, $11 00 | **No. 22.** Without Indicator . Per Dozen, $10 00

Tin Speaking Tube.

1 Inch. . Per 100 ft., $3 00

Elbows for Tin Speaking Tube.

Square Turn . . . Per 100, $3 50
Round " . . . . " " 6 00

Zinc Bell Tube.

Per Pound . . $0 30

Spring Alarm Door Bells.

Half Size Cut of No. 134

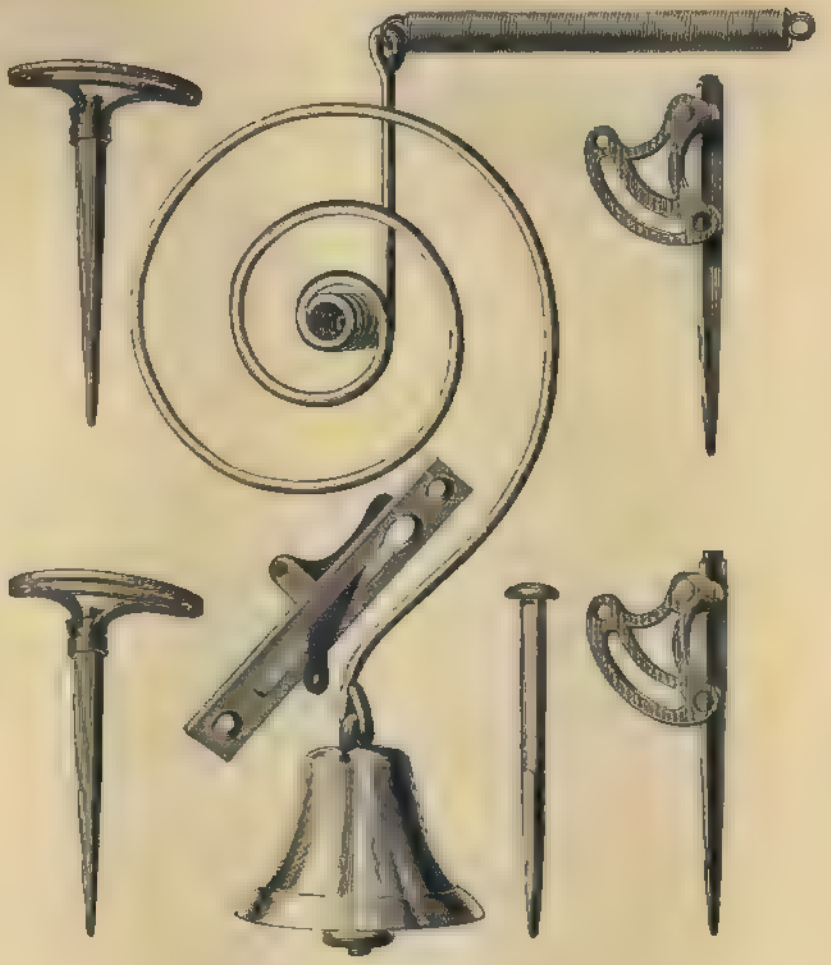
Polished Bell.

Japanned Spring.

No. **132.**	With No. 2 Bell	Per Dozen,	$ 9 60
No. **133.**	" No. 3 "	" "	11 25
No. **134.**	" No. 4 "	" "	13 50

Half Dozen in a Package.

House Bells on Carriages.



Nos. 122, 123 and 124. Half Size Cut of No. 124, Complete

With Spikes only.

Same Carriage with each Number, but Different Size Bell.

No. **112.**	With No. 2 Polished Bell on Carriage, with Spikes,	Per Dozen, $5 75
No. **113.**	" No. 3 " " " " " "	" " 6 10
No. **114.**	" No. 4 " " " " " "	" " 7 75

Complete.

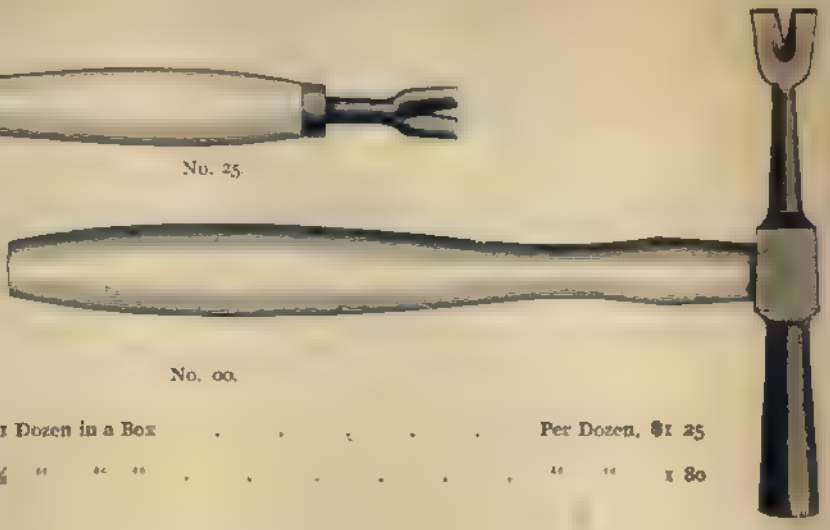
Same Carriage and Trimmings with each Number, but Different Size Bell.

No. **122.**	With No. 2 Polished Bell, Complete with Trimmings, as per Cut,	Per Dozen, $ 8 75
No. **123.**	" No. 3 " " " " " "	" " 9 50
No. **124.**	" No. 4 " " " " " "	" " 11 15

Half Dozen in a Package.

Tack Hammers.

No. 25.

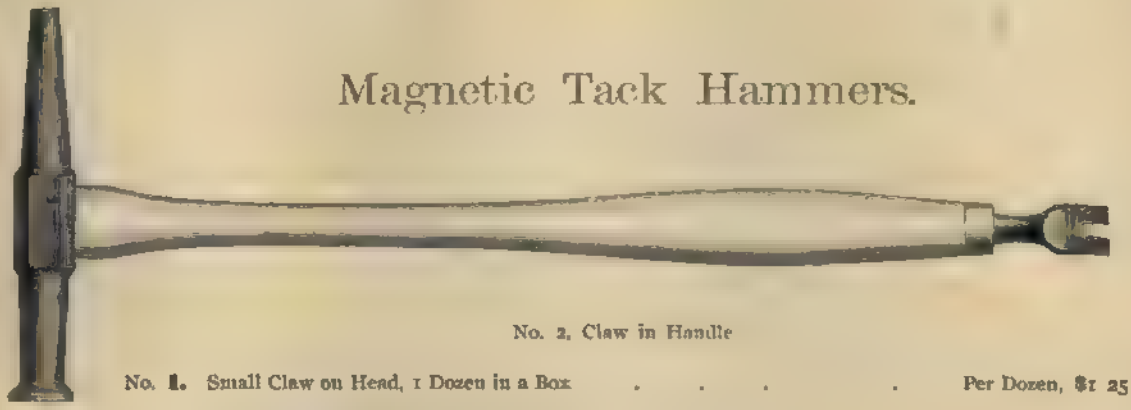


No. 00.

No. 25. Polished, with Claw, 1 Dozen in a Box . . . . . Per Dozen, $1 25

No. 00. Japanned, ½ " " " . . . . . " " 1 80

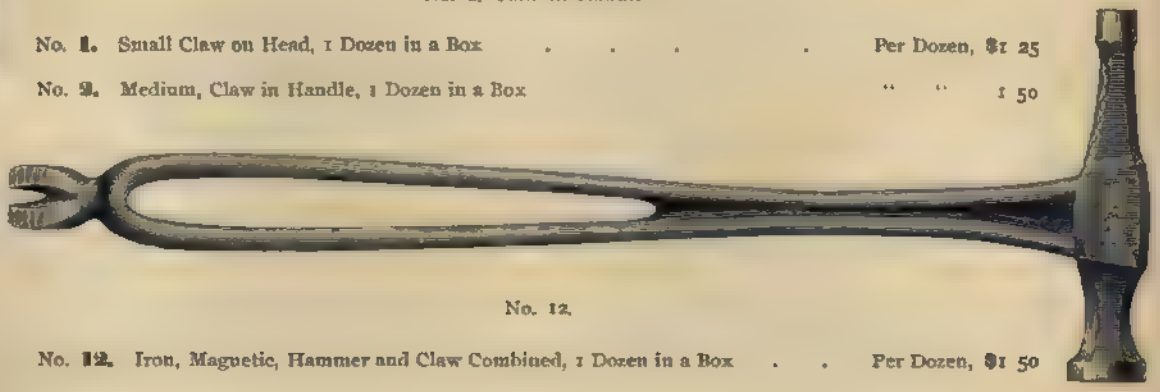
Magnetic Tack Hammers.



No. 2, Claw in Handle

No. 1. Small Claw on Head, 1 Dozen in a Box . . . . Per Dozen, $1 25

No. 2. Medium, Claw in Handle, 1 Dozen in a Box " " 1 50



No. 12.

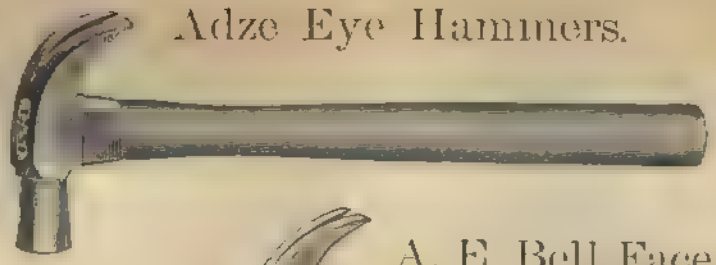
No. 12. Iron, Magnetic, Hammer and Claw Combined, 1 Dozen in a Box . . Per Dozen, $1 50

Patent Improved Tack Hammer.

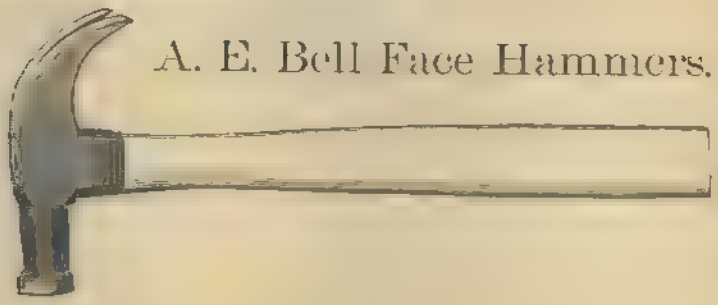
No. 4.

No. 4. Malleable Iron, Inlaid with Black Walnut, Hardened Face, 1 Dozen in a Box . Per Dozen, $2 50

Adze Eye Hammers.



A. E. Bell Face Hammers.



Adze Eye Hammers.

Nos.	1	1½	2	3
Weight, Each,	20	16	13	7½ oz.
Maydole's, Per Dozen,	$8 00	7 00	6 00	5 00
Yerkes & Plumb's, " "	9 50	8 50	7 50	
Sunset, " "	7 00	6 50	6 00	

A. E. Bell Face Hammers.

Nos.	11	11½	12	13
Weight, Each,	19	15	12	7 oz.
Maydole's, Per Dozen,	$8 00	7 00	6 00	5 00
Yerkes & Plumb's, " "	9 50	8 50	7 50	

"Heller Bros." Cast Steel Rounding Hammers.

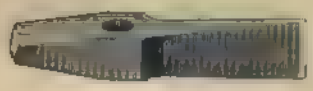
One Size Only. Weight about 2¼ lbs . . . . . Each, $2 00

Farriers' Turning Hammers.

Solid Cast Steel . . . Each, $3 00

Blacksmiths' Tools.

Hot Chisels.



Cold Chisels.

Eye Chisels, Hot or Cold.

1 Inch	Each, $1 00	1¼ Inch .	Each, $1 25

Solid Cast Steel Round and Square Eye-Punches.

Inch,	½	¾	1	1¼	1½
Each,	$0 75	1 00	1 25	1 50	1 85

Hardies.

Anvil Hardies.

Inch,	¼	⅜	½	¾	1
Each,	$0 75	0 90	1 00	1 25	1 50

Flatters.

Solid Cast Steel Flatters.

Inch,	2	2½	3	3½	4
Each,	$2 00	2 50	3 00	3 50	4 00

Top Fullers.

Solid Cast Steel Top Fullers.

Inch,	¼	½	¾	1	1¼	1½	2
Each,	$0 75	1 00	1 25	1 50	1 75	2 00	2 50

Bottom Fullers.

Bottom Fullers.

Inch,	⅜	½	⅝	¾	1	1¼	1½	2
Each,	$0 75	0 75	0 75	1 00	1 25	1 50	1 75	

Top Swages.

Solid Cast Steel Top Swages.

To Inch,	¼	⅜	½	⅝	¾	⅞	1	1¼	1½	1¾	2	2¼	2½	3
Each,	$1 25	1 50	1 50	1 50	1 75	1 75	2 00	2 25	2 50	2 75	3 00	3 50	4 00	5 00

Bottom Swages.

Solid Cast Steel Bottom Swages.

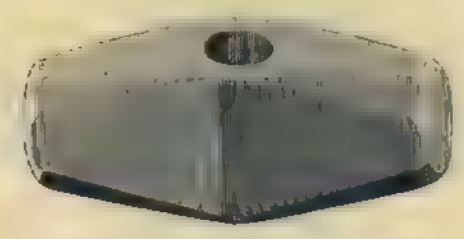
(When ordering give size of Hardy Hole.)

To Inch,	¼	⅞	1	1¼	1½	1¾	2	2¼	2½	2¾	3	3½	4
Each,	$1 25	1 25	1 50	1 75	[illegible]	2 25	2 50	2 75	3 00	3 25	3 50	3 75	4 00

Blacksmiths' Sledges.

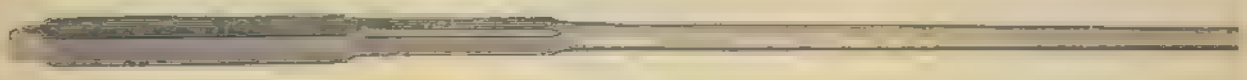
All Weights . . . . . Per Pound, $0 30

Double Face Sledges.



Oil Finish, Unhandled, all Weights . Per Pound, $0 30 | Full Polished, Handled . . . . Per Pound, $0 45

Steel Crow Bars.



Wedge Point.

Pinch Point.

Assorted Weights, from 12 to 20 Pounds . . . . . Per Pound, $0 12

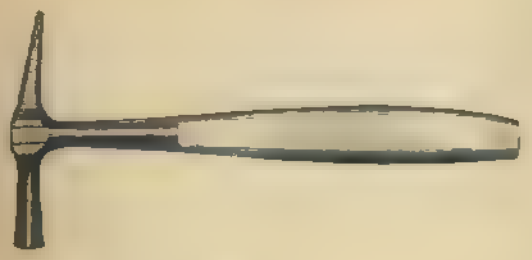
We always send Wedge Point, unless otherwise ordered

"Sunset" Steel Wedges.

Sunset Per Pound, $0 20 | Truckee Per Pound, $0 10

Upholsterers' Hammers.

STEEL.



Style of A.

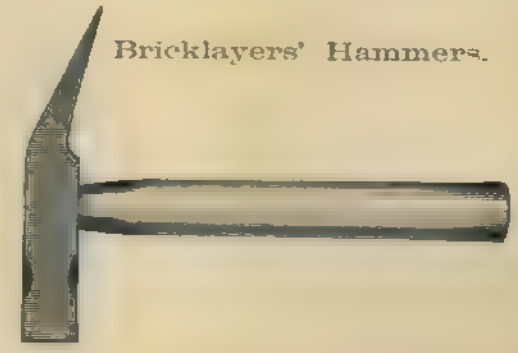
Style of D.

A—Plain Hammer . .	Per Dozen, $6 00	**C**—Claw on Side of Hammer . .	Per Dozen, $ 9 00
B—Claw on the Top of Hammer . .	" " 7 00	**D**— " " End of Handle . . .	" " 11 00

Shoemakers' Hammers.

No. 1	Per Dozen, $5 00
No. 2	" 5 50

Bricklayers' Hammers.



Cast Steel. Handled.

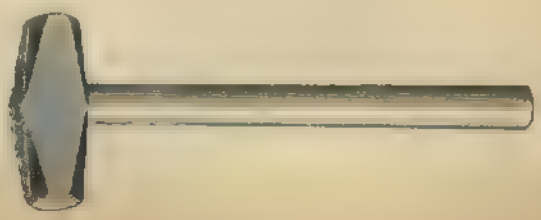
Weight 2½ lbs — Per Dozen, $15 00

Coopers' Hammers.

All Cast Steel.

Weight	3	3½	4	4½	5 lbs.
Each,	$1 25	1 50	1 75	1 90	2 00

Solid Cast Steel Drill Hammers.

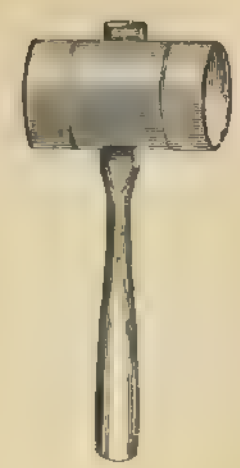


Oil Finished. Handled.

Weight,	3	3½	4	4½	5 lbs.
Each,	$1 15	1 25	1 50	1 60	1 75

Mallets—Assorted.

Tinners' Mallet.



Round.

Square.

Ring

EASTERN MALLETS.

Tinners.

Round, Hickory, Assorted . .	Per Dozen, $2 00

Ring.

Round, Hickory, Iron Rings . .	Per Dozen, $8 50

Carpenters'.

Round, Hickory, 6x4 Inch . .	Per Dozen, $3 50
Square, Hickory, 6 Inch Long . .	Per Dozen, $3 50
" " 7 " " . . . " "	4 00

Lignum Vitæ.

Round, No. 9, 5 x3 Inch . .	Per Dozen, $4 00
" No. 11, 5½x3½ " . . . " "	5 00
" No. 13, 6 x4 " . . " "	6 00
Square, No. 8, 6 Inch Long . .	Per Dozen, $5 00
" No. 10, 6½ " " . . . " "	6 00
" No. 12, 7 " " . . . " "	7 00

Long Island Co.'s Second Growth Hickory Mallets.

Round, Hickory, 6x3 Inch . .	Per Dozen, $5 50
" " 6x3½ " . . . " "	6 50
" " 7x4 " . " "	8 00
Square, Hickory, 6 Inch Long .	Per Dozen, $8 50
" " 7 " " . . " "	9 00

Calking Mallet.

Calking Mallets.

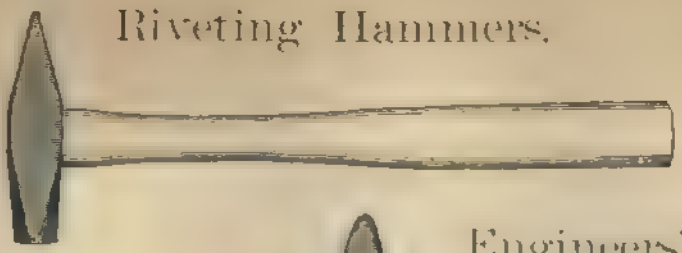
White Oak, Iron Ring . .	Per Dozen, $15 00
Live " Steel "	" " 24 00

Bung Starters.

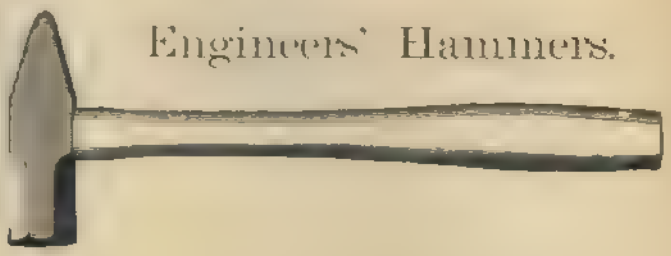
Per Dozen	$4 00

Bung Starter.

Riveting Hammers.



Engineers' Hammers.



Riveting Hammers.

Nos.	0	1	2	3	4	5	6	7
Per Dozen,	$3 50	4 00	4 50	5 00	5 50	6 00	7 00	8 00

Engineers' Hammers.

Nos.	0	1	2	2½	3	4
Per Dozen,	$7 00	9 00	11 00	12 00	13 00	15 00

Masons' Hammers.

Handled and Polished, Assorted Weights . . . . . Per Pound, $0 40

Rock Breaking or Napping Hammers.

Assorted, 3 to 12 lbs . . . Per Pound, $0 35

Top Mauls.

Y. & P.'s Cast Steel . . . . Per Pound, $0 40

Horton's Ship . . . . . Each, 1 75

Railroad Spiking Mauls.

Y. & P.'s Cast Steel Per Pound, $0 30

Farriers' Hammers.

"Maydole's."

No. **51.**	Adze Eye	Per Dozen, **$6 00**
No. **52.**	" "	" " 5 00
No. **55.**	Plain	" " 3 50

Driving Hammers.

"Heller Bros."

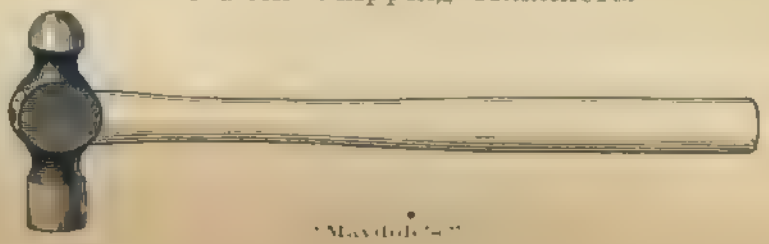
Per Dozen **$10 00**

Pick Pointing Hammers.

Cast Steel.

No. **2.** Weight 2 lb 1 oz., ... Per Dozen, **$15 00**

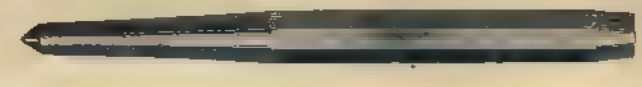
Ball Pein Chipping Hammers.



"Maydole's"

Nos.	**77**	**76**	**75**	**74**	**73**	**72**	**71**	**70½**	**70**
Weights,	7 oz.	10	12	16	20	24	30	2¼ lbs.	3 lbs.
Per Dozen	**$7 00**	8 00	9 00	10 00	11 00	12 00	13 00	14 00	16 00

Centre Punch.



Best Octagon Cast Steel . . . . . Per Dozen, $2 00

Prick Punch.

Best Octagon Cast Steel . . . . . Per Dozen, $1 50

Coopers' Punches.

Size Steel 1/2 Inch, Points 1/8 Inch to 1/4 Inch . . . . . Per Dozen, $2 00
" " 5/8 " " 5/16 and 3/8 Inch . . . . . " Lb, 0 40
" " 3/4 " " 7/16 " 1/2 " . . . . . " " 0 40

Average Weight per Dozen, 5/8 Inch 7 lbs ; 3/4 Inch 11 lbs.

Cast Steel Cold Chisels.

OCTAGON STEEL.

PUT UP IN PAPER BOXES

All Warranted, and the Best Finished Goods in the Market.

Size of Steel,	¼	⅜	½	⅝	1 Inch.
Average Weight per Dozen, *about*	3½	7	10	14	19 lbs.

Price . . . . . Per Pound, $0 40

Cape Chisels.

OCTAGON STEEL.

Size of Steel, 3/4 Oct. Width of Points, 1/4, 5/16 and 3/8 Inch. Average Weight per Dozen, 9 lbs.

Price . . . . Per Pound, $0 40

Wrought Iron Tumbler Padlocks.

No. 100. Old No 4-0

No. 122. Old No 1037.

No. 200. Old No. 3-0.

No. 201. Old No. 3-0.

Numbers	Size	DESCRIPTION	Per dozen	
			1 Key	2 Keys.
100	2 Inch.	1 Wheel, 4 Changes, Fancy Key.	$1 70	$1 90
122	2 "	Self-Locking, 4 Changes, Brass Bushing, Revolving Key Pin, Flat Steel Key.	2 95	3 65
200	2¼ "	Plain, without Drop	2 50	2 90
201	2¼ "	" with Brass Drop.	2 85	3 25

Wrought Iron Tumbler Padlocks.

No. 202. Old No. 0.

No. 218. Old No. 1063.

No. 223, Monogram Back. Old No. 1043.

No. 232, Monogram Back. Old No. 1 53

Numbers.	Size.	DESCRIPTION	Per dozen 1 Key	Per dozen 2 Keys
202	2⅝ Inch.	4 Changes, Raised Bushing, Brass Drop	$3 00	$3 40
218	2¾ "	1 Tumbler 6 Changes, Brass Bushing, Engraved Drop, 1 Wheel Ward, Revolving Key Pin, Flat Steel Key	5 45	6 50
223	2¾ "	1 Tumbler 6 Changes, Brass Bushing, Double Chamber, Revolving Key Pin, Double Bitted Flat Steel Key	6 70	7 95
232	2¾ "	Self-Locking 1 Tumbler, 6 Changes, Brass Bushing, Double Chamber 1 Ward, Revolving Key Pin, Double Bitted Flat Steel Key	7 10	8 35

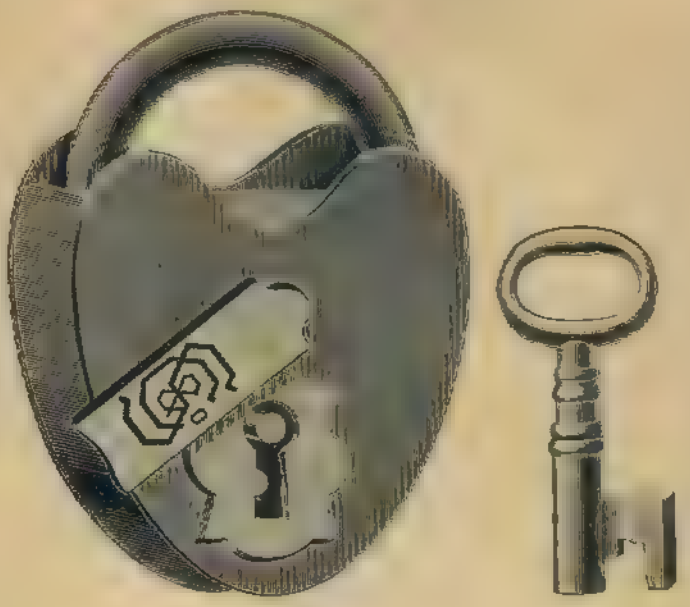
Wrought Iron Tumbler Padlocks.

No. 301. Old No. 1

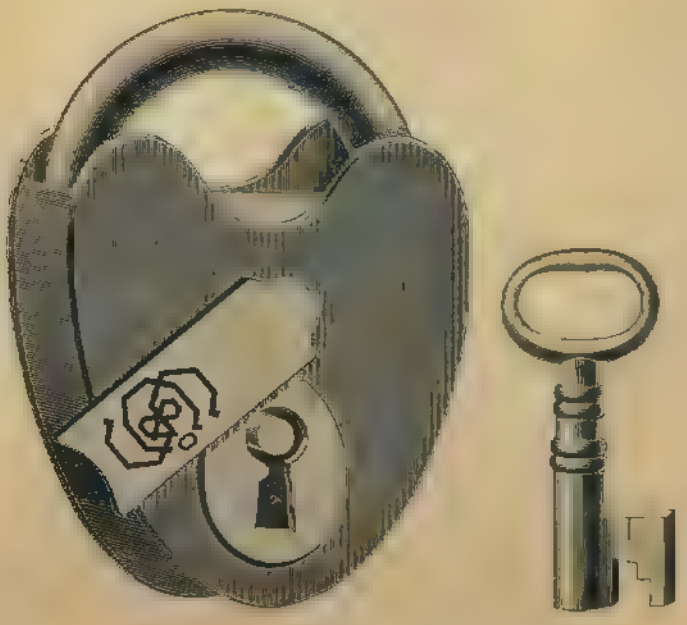
No. 302. Old No. 2.

Numbers.	Size.	DESCRIPTION.	Per dozen.	
			1 Key.	2 Keys.
301	2½ Inch.	Plain, with Brass Drop	$3 50	$3 90
302	2¼ "	6 Changes, Brass Drop and Bushing	3 85	4 25

Wrought Iron Tumbler Padlocks.



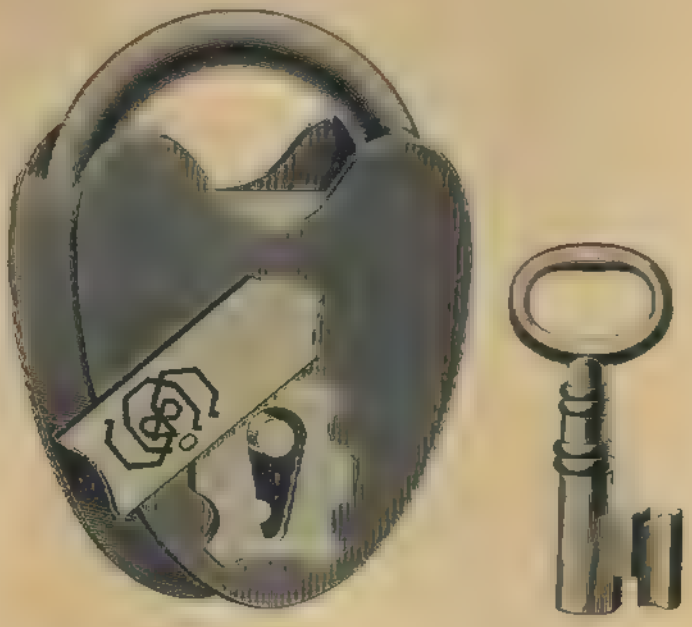
No. 303. Old No. 3



No. 315. Old No. 4.

Numbers.	Size.	DESCRIPTION	Per dozen 1 Key	Per dozen 2 Keys.
303	2½ Inch.	6 Changes, Brass Drop and Bushing . .	$4 20	$4 80
315	2½ "	1 Tumbler, 6 Changes, Brass Drop and Bushing, 1 Wheel and Side Ward	4 85	5 50

Wrought Iron Tumbler Padlocks.



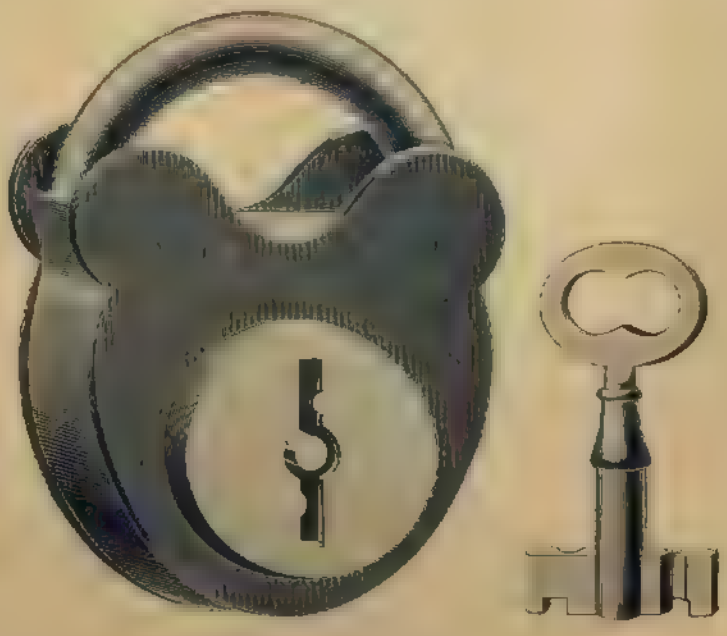
No. 316. Old No. 5.

No. 318. Old No. 1064

Numbers	Size	DESCRIPTION	Per dozen	
			1 Key	2 Keys
316	2½ Inch.	1 Tumbler, 12 Changes, Brass Drop and Bushing, Wheel and Side Wards	$5 10	$6 05
318	2⅝ "	6 Changes, Engraved Drop, Brass Bushing, Heavy Shackle, Cylinder Key	6 70	7 60

Wrought Iron Tumbler Padlocks.

No. 321. Old No. 1048.



No. 343, Brass Key. Old No. 1067.

Numbers.	Size.	DESCRIPTION.	Per dozen.	
			1 Key.	2 Keys.
321	2½ Inch	1 Tumbler, 5 Changes, Brass Loop, Wheel Ward, Self Locking Spring Shackle,	$4 60	$5 00
343	2⅝ "	1 Tumbler, 6 Changes, Brass Bushing, Wheel and Side Wards, Double Chamber, Double Bitted Brass Key	8 35	10 00

Wrought Iron Tumbler Padlocks.

No. 344. Old No. 1004.

No. 357. Old No. 1015.

No. 365. Old No. 6.

Numbers.	Size.	[illegible]	Per dozen	
			1 Key.	2 Keys.
344	2½ Inch.	1 Tumbler, 12 Changes, Brass Bushing, 3 Solid Brass Wheels, Bridge Wards, Nickel-Plated Patent Steel Key, Brass Bushing on Back	$7 50	8 20
357	2⅛ "	1 Tumbler, 6 Changes, Brass Drop and Bushing, Solid Brass Wheel, Bridge Ward, Recovering Key Tube, Self Locking Spring Shackle, Double Bitted Key, Brass Bushing on Back	8 35	9 60
365	2⅛ "	1 Tumbler, 12 Changes, Engraved Drop, Brass Bushing, 1 Wheel and Side Ward,	6 25	7 20

Wrought Iron Tumbler Padlocks.

No. 386, Monogram Back. Old No. [illegible].

No. 386 C, Monogram Back. Old No. 1032.

Numbers	Size.	DESCRIPTION.	Per dozen. 1 Key.	Per dozen. 2 Keys.
386	2½ Inch	1 Tumbler, 6 Changes, Engraved Drop, Brass Bushing, 1 Wheel Ward, Revolving Key Pin, Heavy Shackle, Flat Steel Key, Monogram Brass Bushing on Back,	$7 10	$8 15
386 C	2¾ "	Same as No. 386, with Chain	9 20	10 25

Wrought Iron Tumbler Padlocks.

No. 404 Monogram Back. Old No. 1031

No. 607. Old No. 1076.

Numbers.	Size.	DESCRIPTION.	Per dozen. 1 Key.	Per dozen. 2 Keys.
404	2½ Inch.	1 Tumbler 6 Changes Brass Bushing, 1 Wheel Ward Double Chamber Revolving Key Pin, Double Bitted Flat Steel Key, Monogram Brass Bushing on Back.	$ 8 35	$ 9 60
607	2¾ "	12 Changes, Engraved Drop, Brass Bushing, Wheel, Side and Bridge Wards, Brass Bushing on Back, Revolving Key Pin, Flat Steel Key . . .	10 00	11 05

Wrought Iron Tumbler Padlocks.

No. 702. Old No. 10.

No. 705. Old No. 1008.

Numbers.	Size.	DESCRIPTION.	Per dozen	
			1 Key	2 Keys
702	3 Inch.	6 Changes, Brass Bushing, 1 Wheel and Side Wards	$6 70	$7 60
705	3 "	6 " Brass Drop and Bushing, 3 Solid Brass Wheels	8 35	9 45

Kentucky Cow Bells.

Half Size Cut of No. 2.

Nos.	0	1	2	3
Height (without Loop),	7	6½	5¼	4½ Inch.
Per Dozen,	$13 00	11 00	8 00	6 00
Nos.	4	5	6	7
Height (without Loop),	4	3½	2½	2¼ Inch.
Per Dozen,	$5 00	4 00	3 00	2 50

Cast Sheep Bells.

Full Size Cut of No. 2.

Loose.

Nos.	1	2	3
Per Dozen,	$2 00	2 50	3 00

Strapped with Leather Straps.

Nos.	1	2	3
Per Dozen,	$3 00	3 50	4 00

Celebrated Swiss Cow Bells.

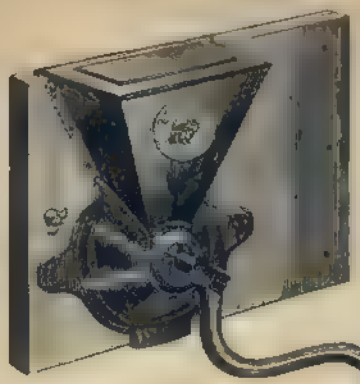
SAIGNELEGIER

Fine in Tone. Pretty in Finish. Weight about 3 lbs.

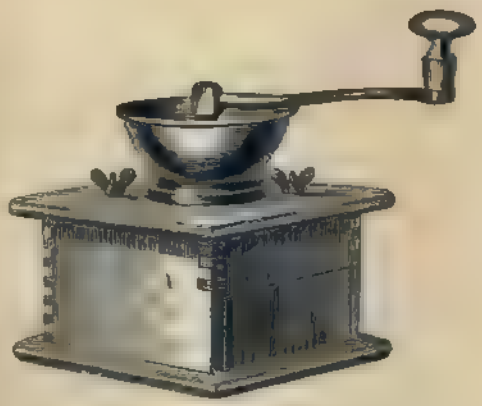
5½ Inch High, 6 Inch at Mouth . . . . . Per Dozen, $30 00

The Loop will admit of a 3 Inch Strap.

Coffee Mills.



SIDE MILL.



"PARKER'S" BOX MILL.

NATIONAL BOX MILL, Nos. 400 to 403

"Parker's" Side Coffee Mills. Wood Back.

Nos.	130	131	132	133	134
Old Nos.	California	0	1	2	3
Per Dozen,	$25 00	15 00	9 00	7 00	6 00

"Parker's" Box Mills.

	Iron Hopper.			Britannia Hopper.		
Nos.	115	116	117	Nos. 110	111	112
Per Dozen,	$9 50	8 50	6 50	Per Dozen, $12 00	10 50	9 00

National Box Mills. Iron Top.

Nos.	400	401	402	425
Per Dozen,	$11 50	13 00	14 00	15 00

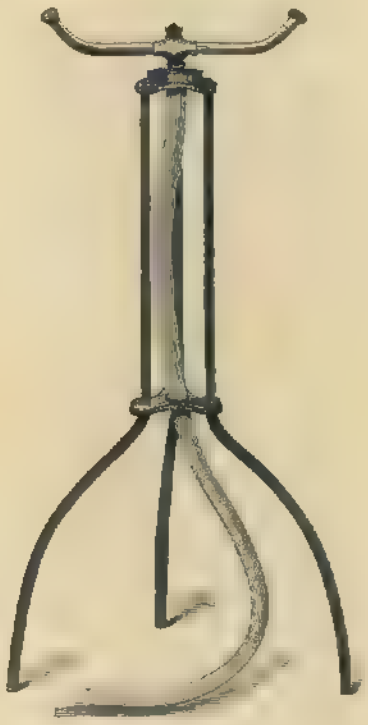
"American"

Coffee Mill.

This Mill grinds six ounces of Coffee per minute, and is regulated to grind coarse or fine by a thumb-screw on the side. It is adapted to family use and prescription counters.

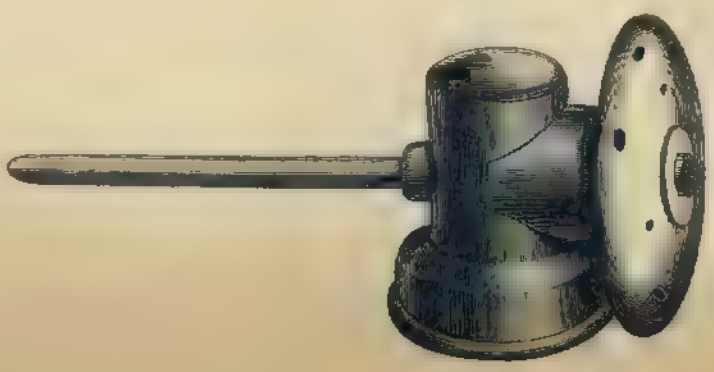
Stands 12½ Inches High, Weighs 8 lbs . . . . . Each, $2 00

"California" Lawn Sprinkler and Stand.



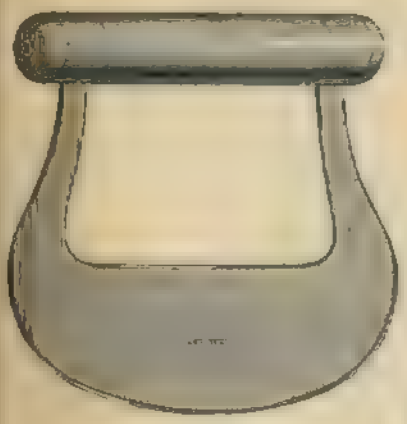
Sprinkler	Each, $
Stand	"
Sprinkler and Stand Complete	

"Perfection" Lawn Sprinkler.



For Either ¼ or 1 Inch Hose	Per Dozen, $ 15 00

Cast Steel Mincing Knives.



No 0

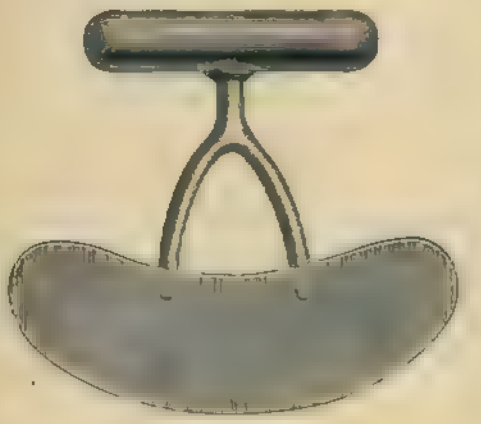
No. 0 Per Dozen, $5 50

No. 2

No. 2 Per Dozen $6 00

No 10

No. 10 Per Dozen, $3 00



No. 9.

No. 9 Per Dozen, $1 50

No. 16.

No. 16 Per Dozen, $2 50

No 8.

W. M. & C. Mincers.

No. 1. Cast Steel Blade, Malleable Shank — Per Dozen, $1 50

No. 8. Heavy Cast Steel Blade, Varnished Handle — 4 00

No. 4. Same Style as No. 8, Smaller, Plain Handle — 3 00

The "CV" Gopher Trap.

NEVER FAILS TO CATCH AND KILL

DIRECTIONS FOR SETTING.—Scoop out the gopher hole; then set the Trap by pressing down the spring, and placing the lever, A, over the fulcrum, B, and into the pin-hole on the pan, C Then shove the Trap well into the gopher hole, covering up the points thoroughly. Set lightly, so that the dirt, when shoved out by the gopher, will spring the Trap

Price . . . . . Per Dozen, $2 50

The "Scorpion" Gopher Trap.

THIS CUT SHOWS THE TRAP PARTLY CLOSED

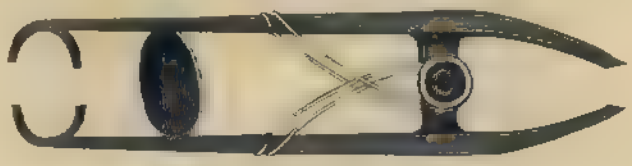
Price . . . . . Per Dozen, $2 50

"California" Gopher Trap.

Price . . . . . Per Dozen, $8 00

The "Excelsior" Gopher Trap.

PATENT APPLIED FOR.



THIS CUT SHOWS THE TRAP SET

Place the Trap well in the hole horizontally, and see that the plate is free from the sides of the hole, then place a stake through the back of the Trap, or attach a cord so that the gopher cannot drag the Trap into the hole when caught.

Price Per Dozen, $5 00

Wood Mouse Traps.

Holes,	2	3	4	5	6
Per Dozen,	$0 60	0 90	1 20	1 50	1 80

Cheese Tryers.

Sizes, Inch,		4	5	6
Japanned Handle, Polished Blades,	Per Dozen,	$3 25	3 50	4 00
Nickel-Plated Handles and Blades,	" "	4 75	5 00	5 50

Butter Tryers, Steel Blade, 24 Inch — Per Dozen, $24 00

Grain Tryers.

Brass, 5 1/2 Inch Long — Per Dozen, $10 50
" 5 1/2 " " Plated — " " 12 00

Steel, 5 1/2 Inch Long — Per Dozen, $12 00

Coffee Tryers, with Cap — Per Dozen, $15 00

Wrought Seamless Brass Ferrules.

Sizes, Inch,	7/16	1/2	9/16	5/8	3/4	7/8	1
Per Gross,	$0 50	0 60	0 65	0 75	0 90	1 25	1 90

Cast Brass Ferrules.

Sizes, Inch,	1/2	9/16	5/8	3/4	7/8	15/16	1
Per Gross,	$3 50	4 50	5 00	7 00	10 50	11 00	12 00

Cane or Umbrella Ferrules.

SOLID ENDS. STEEL

Assorted to 3/4 Inch — Per Gross, $6 00

American Hack Saws.

Hack Saws, with Stubbs' Blades, Complete.				
Inches,	8	10	12	14
Per Dozen,	$18 00	21 00	24 00	27 00

Stubbs' Hack Saw Blades.					
Inches,	8	10	12	14	16
Per Dozen,	$3 00	4 50	6 00	7 00	9 00

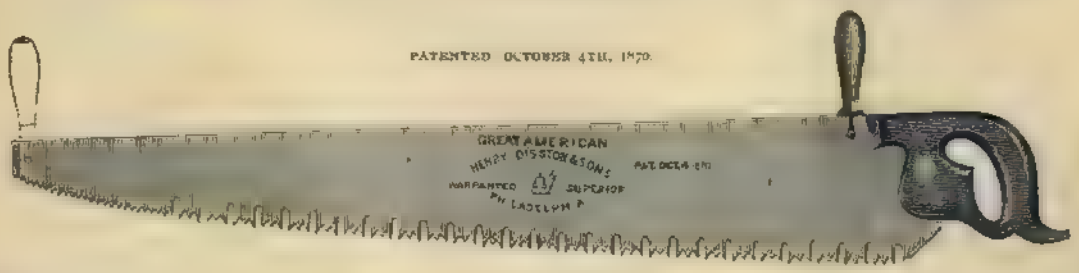
"Griffin's" Hack Saw.

One Dozen Blades With Each Frame.

Size, 9 Inch Blade, Complete with Frame . . . . . Per Dozen, $18 00

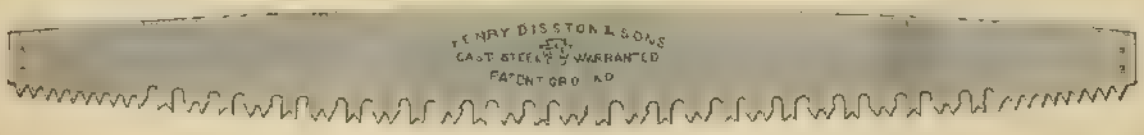
Extra Blades . . . . . Per Dozen, $0 75

"Disston's" Great American One Man Saw.



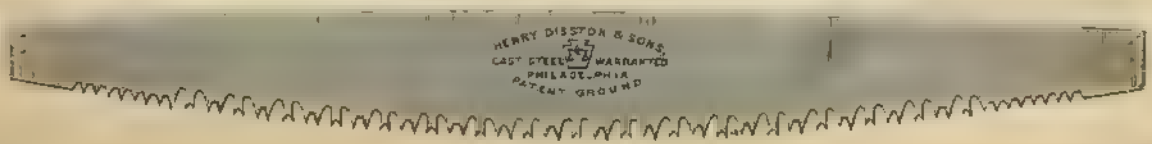
Size, Feet	3	3½	4	4½	5
Each,	$2 75	3 00	3 50	4 00	4 50

TUTTLE TOOTH.



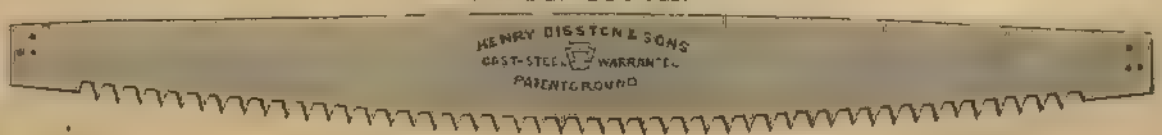
Price . . . . . Per Foot, $0 60

CHAMPION TOOTH, No. 2.



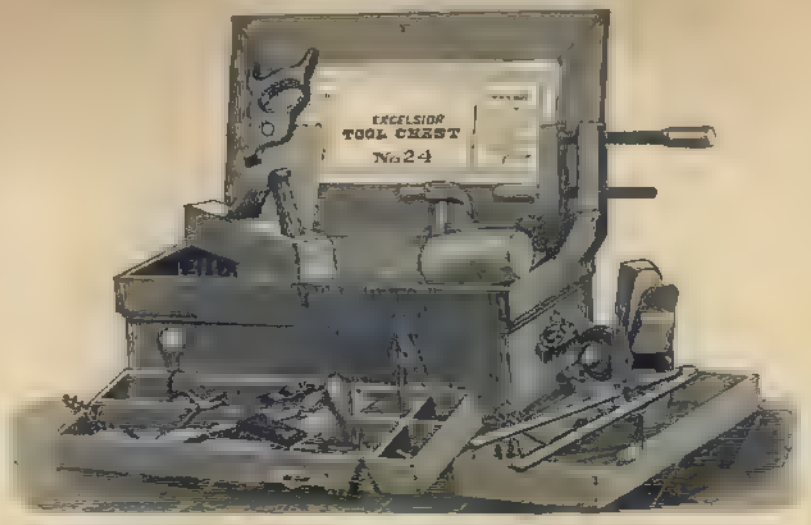
Price . . . . . Per Foot $0 60

PLAIN TOOTH.



Price . . . . . Per Foot, $0 60

"Excelsior" Chests and Tools.



These Chests are all made from the best selections of young growth Chestnut, trimmed with heavy Black Walnut mouldings, with sliding Drawers and Tills, with fancy lifting Handles, Lock and Key, all complete Tools all first-class

No. 20. Chest and Tools.

Price $5 00

Size, 14 inches long, 6¼ inches wide, and 5 inches deep.
Contains 20 tools, as follows

1 Smoothing Plane,
1 Claw Hammer,
1 Polished Mallet,
1 Try Square,
2 Brad Awls (Handled),
1 Saw File and Handle,
1 Pair Flat Nose Pliers,
9 Nail Gimlets,
1 Marking Awl
1 Hand Saw,
1 Hatchet,
1 Marking Gauge
1 Screw Driver,
2 Chisels and Handle
1 Hickory Hand Screw,
1 Lead Pencil,
1 Four Fold Rule, one foot long

No. 21. Chest and Tools.

Price $7 00

Size, 16 inches long, 7½ inches wide, and 5¼ inches deep
Contains 25 tools, as follows

1 Smoothing Plane,
1 Shingling Hatchet,
1 Marking Gauge,
1 Trying Square,
2 Brad Awls Handled),
1 Marking Awl Handled),
1 Pair Flat Nose Pliers,
1 Saw File (Handled)
3 Nail Gimlets (Assorted),
1 Pair Carpenter's Pincers,
1 Chalk Line Reel
1 Hand Saw (Filed and Set),
1 Claw Hammer,
1 Hickory Mallet,
1 Screw Driver,
1 Lead Pencil),
2 Firmer Chisels (Polished Handles)
1 Cabinet File (Handled
1 Hickory Hand Screw
1 Four Fold One Foot Rule
1 Nail Punch

No. 22. Chest and Tools.

Price $9 00

Size 18 inches long, 8¼ inches wide, and 6½ inches deep,
Contains 33 tools, as follows:

1 Smoothing Plane,
1 Shingling Hatchet,
1 Ball Brace,
1 Four Fold Foot Rule,
1 Trying Square,
1 Cabinet File (Handled),
1 Claw Hammer,
1 Pair Flat Nose Pliers,
2 Brad Awls (Handled)
1 Japanned Oil Can,
1 Hindoo Oil Stone
1 Pair Carpenter's Pincers,
3 Nail Gimlets (Assorted)
1 Screw Driver Bit,
1 Hand Saw (Filed and Set)
1 Hickory Mallet,
2 Double Cut Bits
1 Hickory Hand Screw
3 Firmer Chisels (Polished Handles),
1 Marking Gauge,
1 Saw File (Handled),
1 Screw Driver,
1 Marking Awl (Handled),
1 Lead Pencil,
1 Nail Punch,
1 Pair Compasses,
1 Pocket Level.

No. 23. Chest and Tools.

Price $12 50

Size, 19½ inches long 9½ inches wide and 7½ inches deep
Contains 46 tools, as follows:

1 Hand Saw Filed and Set),
1 Pair Flat Nose Pliers,
4 Firmer Chisels (Polished Handles),
1 Hickory Mallet,
1 Brace Bits (Assorted)
1 Claw Hammer
1 Hickory Hand Screw
1 Pair Carpenter's Pincers,
1 Chalk Line
1 Japanned Oil Can,
2 Saw Files Handled)
2 Brad Awls Handled),
1 Lead Pencil,
3 Nail Gimlets (Assorted),
1 Plated Cork Screw
1 Cabinet Drawing Knife,
1 Bench Screw,
1 Trying Square,
1 Cabinet File,
1 Jack Plane,
1 Ball Brace,
1 Shingling Hatchet
1 Nail Punch,
1 Chalk Line Reel,
1 Hindoo Oil Stone,
1 Marking Gauge,
1 Two Foot Rule,
1 Pair Compasses
1 Marking Awl (Handled),
2 Sewing Awls Handled)
1 Screw Driver,
1 Pocket Level
1 Screw Driver Bit

No. 24. Chest and Tools.

Price $16 50

Size, 21 inches long, 10¼ inches wide and 8¼ inches deep
Contains 60 tools, as follows

1 Smoothing Plane
1 Hickory Mallet
1 Marking Gauge,
1 Hand Saw (Filed and Set),
1 Chalk Line Reel, with Awl,
Lead Pencil,
2 Brad Awls (Handled),
Pocket Level
Brad Awls Set (20 tools)
Two Foot Rule,
Hickory Hand Screw
1 Hindoo Oil Stone
Pair Compasses
Pair Flat Nose Pliers
Cabinet Drawing Knife
Marking Awl (Handled
1 Bench Screw
1 Jack Plane,
1 Shingling Hatchet
1 Claw Hammer,
1 Ball Brace,
1 Saw File (Handled)
1 Nail Punch,
1 Pair Carpenter's Pincers,
1 Trying Square,
4 Firmer Chisels Polished Handles),
1 Japanned Oil Can,
1 Screw Driver
5 Nail Gimlets Assorted
4 Brace Bits (Assorted)
1 Screw Driver Bit
1 Chalk Line
1 Plated Corkscrew

No. 25. Chest and Tools.

Price $24 00

Size, 25 inches long, 12½ inches wide, and 9½ inches deep
Contains 70 tools, as follows

1 Hand Saw Filed and set),
1 Panel Saw Filed and Set),
1 Smoothing Plane
1 Hickory Hand Screw,
Nail Gimlets (Assorted),
1 Trying Square,
1 Lead Pencil
1 Two Foot Iron Square,
1 Brad Awl Set 20 tools),
1 Claw Hammer
1 Marking Gauge
Pair Flat Nose Pliers,
Hindoo Oil Stone
Chalk Line Reel with Awl,
Eight Inch Screw Driver
1 Cabinet File (Handled)
2 Brad Awls (Handled)
1 Pocket Level,
Marking Awl Handled)
1 Plated Corkscrew
1 Two Foot Rule,
1 Half Inch Auger Bit
1 Shingling Hatchet,
1 Ball Brace
1 Pair Compasses,
1 Saw File (Handled,
6 Firmer Chisels Polished Handles
1 Jack Plane
1 Hickory Mallet,
4 Brace Bits (Assorted),
1 Nail Punch,
1 Six Inch Screw Driver,
1 Japanned Oil Can
1 Pair Carpenter's Pincers,
1 Screw Driver Bit,
1 Wood Rasp Handled)
2 Sewing Awls (Handled)
1 Chalk Line
1 Cabinet Drawing Knife,
1 Bench Screw

"Sunset" Hatchets.

SHINGLING.

LATHING.

BROAD.

CLAW.

HALF HATCHET.

"SUNSET" BRAND HATCHETS.

Broad.

Nos.	1	2	3	4	5	6	7	8
Width of Cut, Inch,	4	4½	5	5½	6	6½	7	7½
Per Dozen,	$10 50	11 50	13 00	14 50	16 50	18 00	19 50	22 00

Shingling.

Nos.	1	2	3
Per Dozen,	$8 00	8 50	9 00

Lathing.

Nos.	1	2	3
Per Dozen,	$8 00	8 50	9 00

Claw.

Nos.	1	2	3
Per Dozen,	$9 00	9 50	10 00

Half-Hatchet.

Nos.	1	2	3
Per Dozen,	$8 00	8 50	9 00

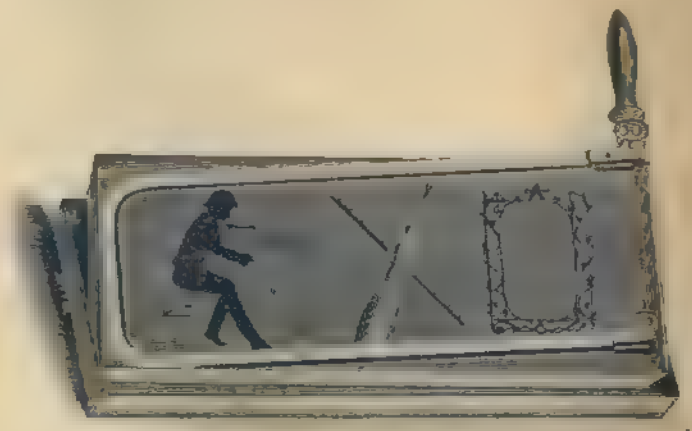
YERKES & PLUMB AND HUNT'S HATCHETS, TAKE SAME LIST AS ABOVE.

"Cricket" Saw.

For Scroll Sawing alone it is about as good as the higher price Saws and the finish is the same as our Easter and Rogers' Saws. It has an Iron Tilting Table. Second growth Ash Arms, 18 Inches long, improved Clamps, etc.

Price $4 50

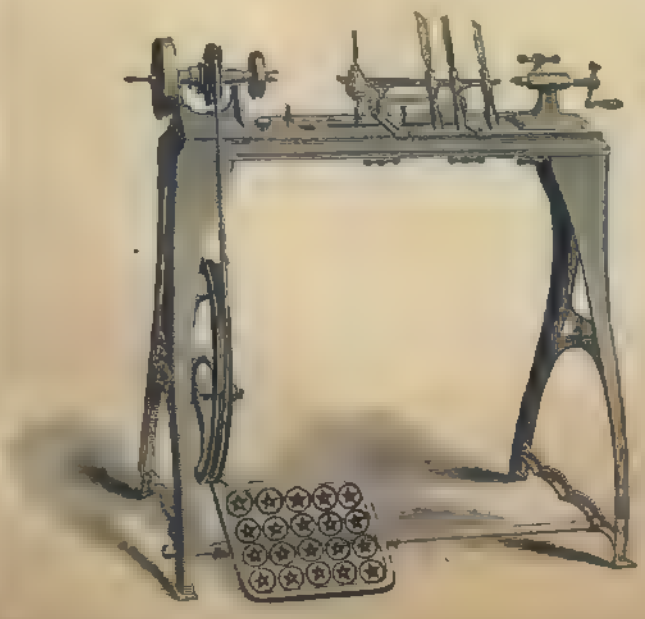
No. 2. Bracket Sets.



These sets are packed in paper boxes and embrace a Spring Steel Saw Frame, polished and nickel plated, 5 x 12 inches, having patent Clamps for holding the Saw Blades, rosewood handle. Fifty full sized designs embracing a great variety of fancy and useful articles. 6 Saw Blades, 1 Awl 1 Sheet of Impression Paper, and full directions for using the Saw.

Price . . . . . Per Dozen, $15 00

"Goodell" Lathe.



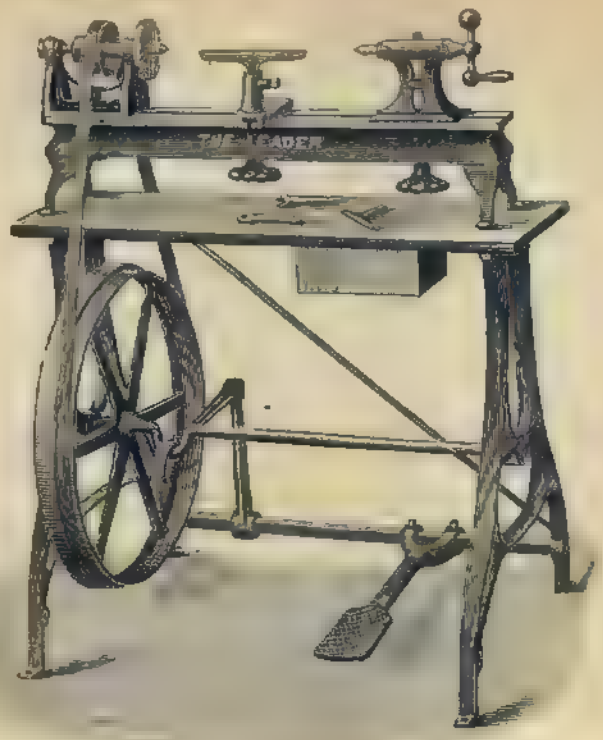
This Lathe was designed by Mr. A. D. Goodell, for many years the master mechanic at the factory in Miller's Falls, and the inventor of many valuable machines. It is patterned almost exactly after the latest improved Lathes now used in the best machine shops and pattern makers' rooms. The large driving wheel has two grooves of varying depths, on its face, to give a change of speed, as the belt runs from it to the cone pulley on the Lathe head. The higher speed is 11 to 1, the lower 7 to 1. The Lathe head is provided with a 2 inch face plate, a spur center, a screw center for turning cups, and also with a very nice drill chuck to hold from 1/32 to 1/4 inch round twist drills for drilling wood or iron. It also has on the outer side of the pulley a 4½ x ¾ inch solid emery wheel and a drill spindle, with set screw, to hold drill points for wood drilling. The tail stock has a screw feed center, which is secured at any point desired, by a clamping arrangement like that on the modern engine lathes. It is also provided with a long and short tool rest, 5 turning tools, wrench, drill points, etc., etc. Swing of lathe, 5 inches; length of bed, 24 inches; distance between centers, 15 inches.

This Lathe is thoroughly built and highly finished, the planed and polished parts being nickel-plated.

Price of Lathe and Lathe Tools . . . $12 00

Combination Lathes.

Lathe without Saw Attachments.



This Lathe has been made especially to meet a want felt by many for a really good and substantially made foot-lathe at a reasonable price and we think that we can safely say that it is by far the best lathe ever placed on the market at the price asked. The bed, head, and tail stocks are of iron, the spindles of steel. The bearings of the head stock are conical, so that the wear can be easily taken up.

Material 18 inches long and 8 inches in diameter can be turned on it.

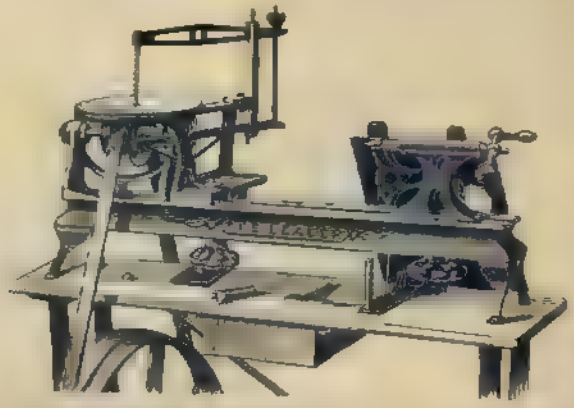
The pieces that accompany this lathe without extra charge are 2 T rests, 2 plain centers, 1 spur center for wood turning, and 1 face-plate.

The bench is made of iron, with a walnut top and drawer for holding tools. Like the lathe, it is well made in all its parts, and is strong, neat and solid.

Circular Saw Attachment.

The above Circular Sawing Attachment is intended for those who desire a good, practical machine, and will be found very effective. The table is of iron planed true, and can be adjusted as to height. It has a guide running in a groove at right angles with the saw, and a slide operated in a similar groove parallel to the saw. The slide can also be adjusted to different angles. One each 4 inch slitting and cutting-off saws accompany this Attachment.

Scroll Sawing Attachment.



This Attachment, like that for Circular Saws, is a good and thoroughly practical machine, sawing wood at least 1½ inches thick. It is moved by a Pitman connecting it with the face-plate by means of a small stud. The bolt of the T rest holder is used for fastening this attachment to the lathe, and when not in use it can be thrown back behind the shears without entirely removing from the lathe, unless so desired.

The depth between the saw and back or upright is 15 inches.

Price of Lathe, without Saw Attachments	$45 00
" " " WITH SCROLL Saw Attachments	55 00
" " " with both Scroll and Circular Saws	70 00

Levels.

MACHINISTS' IRON BENCH LEVEL.

No. **10.** 3 Inch . . . . . Each, $0 75
No. **12.** 5 " . . . . . " 1 00

IRON BENCH LEVEL, FOR SQUARE.

No. **11.** 3 Inch . . . . . Each, $0 80

IRON POCKET LEVEL, FOR SQUARE.

No. **17.** 3½ Inch . . . . . Each, $0 30

POCKET LEVELS.

No. **40.** Cast Iron Top Plate, Japanned, 1 Dozen in a Box . . . . . Per Dozen, $2 50
No. **41.** Brass Top Plates, 1 Dozen in a Box . . . . . " " 3 00

LEVEL GLASSES.

Inch,	1¼	2	2½	3	3½	4
Per Gross,	$9 50	10 00	10 50	11 50	13 00	14 50

MECHANICS' TELESCOPIC PLUMB-LEVEL AND TARGET.

Mechanics will find this instrument the most reliable and accurate working tool ever invented, for determining horizontal and perpendicular lines; and also for sighting grades through the telescope.

Price, Complete $12 00

Plumbs and Levels.

No. 0.

No. 9.

No. 9

Plumbs and Levels.

			Per Dozen
No. **102.**	**Levels, Arch Top Plate, 2 Side Views, Polished**	Assorted 10 to 16 Inch,	$9 00
No. **0.**	**Plumb and Level, Arch Top Plate, 2 Side Views, Polished,**	Assorted, 24 to 30 Inch,	18 00

Patent Improved Adjustable Plumbs and Levels.

			Per Dozen
No. **1.**	**Patent Adjustable Mahogany Plumb and Level Arch Top Plate, 2 Side Views, Polished**	Assorted 26 to 30 Inch,	$27 00
No. **2.**	**Patent Adjustable Plumb and Level, Arch Top Plate, 2 Brass Lipped Side Views, Polished**	26 to 30	27 00
No. **3.**	**Patent Adjustable Plumb and Level, Arch Top Plate, 2 Side Views, Polished and Tipped**	" 26 to 30	30 00
No. **4.**	**Patent Adjustable Plumb and Level, Arch Top Plate, 2 Brass-Lipped Side Views, Polished and Tipped**	" 26 to 30 "	39 00
No. **5.**	**Patent Adjustable Plumb and Level Triple Stock, Arch Top Plate, 2 Ornamental Brass-Lipped Side Views, Polished and Tipped**	" 26 to 30	48 00
No. **6.**	**Patent Adjustable Mahogany Plumb and Level, Arch Top Plate, 2 Brass-Lipped Side Views, Polished**	" 26 to 30	33 00
No. **9.**	**Patent Adjustable Mahogany Plumb and Level, Arch Top Plate, 2 Ornamental Brass-Lipped Side Views, Polished and Tipped**	26 to 30	48 00
No. **10.**	**Patent Adjustable Mahogany Plumb and Level, Triple Stock, 2 Ornamental Brass-Lipped Side Views, Arch Top Plate, Polished and Tipped**	" 26 to 30	60 00

"Green River" Tire Bolt Holder.

For Clamping Bolts while the Nuts are being turned off. Applied without a Screw

Price Each, $1 00

"Lightning" Punching Press.

The handle may be set at any angle, up or down, to suit various kinds of work

This machine is carefully made throughout, of the best material, and is highly approved by our customers.

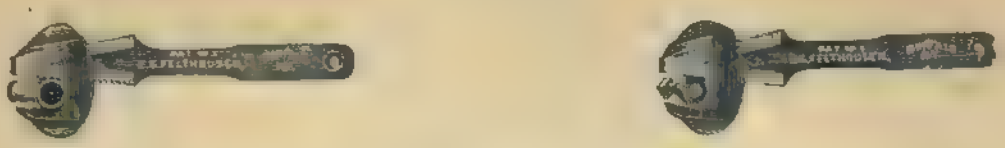
Will Punch 1/4 Inch Round Hole in Iron 1/4 Inch Thick, or 5/16 Inch Hole in Iron 3/16 Inch Thick.

Supplied with 3 Punches and Dies 1/4, 5/16 and 1/2 Inch. Unless otherwise ordered Punches and Dies will be supplied 1/32 Inch over exact sizes.

Price Each, $25 00

Extra Punches or Dies. Each, $0 50

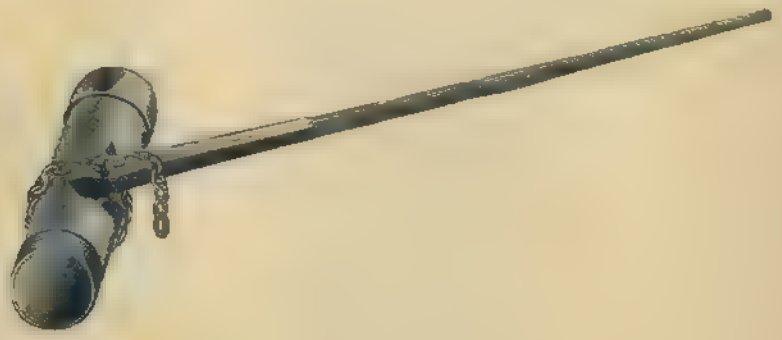
"Kinney's" Patent Combination Pipe Tong and Wrench.



A PIPE TONG ON ONE SIDE, A WRENCH ON THE OTHER

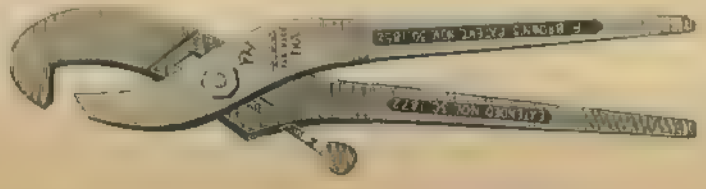
No	1	2	3	4	5
Holds Iron Pipe, Inch,	⅜ to ½	⅝ to ¾	1 to 1½	1½ to 1¾	2 to 1¾
Holds Round Iron, Inch,	⅝	1	1¼	2	2½
Price, Each,	$1 25	1 50	2 00	4 00	5 00

"Robbin's" Patent Chain Pipe Tongs.



No	2	3	4	5	6	7
Holds Pipe, Inch,	½ to 2	½ to 4	2 to 6	2½ to 8	4 to 10	4 to 12
Price, Each,	$5 50	6 25	9 00	12 50	16 00	26 00

"Brown's" Patent Adjustable Pipe Tongs.



No.	1	1½	2	3	4	5
Holds Pipe, Inch,	⅛ to ¾	¼ to 1	½ to 1½	1 to 2	1½ to 3	2½ to 4
Price, Each,	$1 00	1 25	1 60	2 00	4 00	6 75

"Prize Demas" Lathe and Scroll Saw.

Description of "Prize Demas" Scroll Saw.

This machine, as its name indicates, will be a prize to any one fortunate enough to possess one of them. Its principles are such as practical experience have proven to excel in every particular Five years of constant devotion to the public's wants has produced this result, in it we have overcome every defective point which may have been brought up by some of the many thousands who, in the past five years, have used a lathe and saw of some description, and we can now truthfully say that in this machine you get everything that the heart may crave for, and put up in such a manner as will give you perfect satisfaction. It is as much a necessity in every household as the sewing machine, and its benefits are much greater. Every man can be proud of it. Every machine or part thereto, is thoroughly inspected before leaving the factory. Still, as heretofore, we consider it a favor for any party to notify us at once should they get a machine which is not perfectly satisfactory in every respect, as we have always made it a point to please all and wish to continue to do the same.

The above cut is an exact representation of the true proportions of this machine, which is exceedingly symmetrical and tasty in appearance. While we have been sparing of the iron, it has been properly and practically distributed, producing the greatest possible strength.

Dimensions and capacity of machine are as follows · Height from floor to top of lathe bed, 27½ in. ; to centers, 30 in ; to top of saw table, 32 in. ; length of lathe bed, 24½ in. ; it will turn a piece 16 in long and 5 in in diameter, diameter of balance wheel, 14 in. , weight, 11 lbs , stroke of crank, 4 in. , size of lathe spindle, 7/16 , short rest, 4 in long; long rest, 12 in. ; stroke of scroll saw, 1¼ in. , it will cut 1½ in. thick, if necessary but 1 in. practically, and swing 20 in. in the clear , it has tilting table, which is ground and polished ; the ways to lathe bed are also ground and polished — in fact it is so finished that it will do just as fine work and just as satisfactorily as any $50.00 lathe and saw Chucks for holding drills, etc , can be attached. Weight, 50 pounds.

Price $10 00

The New "Rogers" Saw.

ALL PARTS MADE TO INTERCHANGE.

While our Jig Saw possesses *every improvement* and *advantage claimed* for any other in the market, we further claim the following points of superiority, viz.

1. The *Bearings to the Arms* are carefully sized to bring them in perfect line. (This is a vital point in the construction of any Jig Saw.)

2. We provide each machine with a *Dust Blower*, which is a very *great advantage*.

3. Our machine has a *jointed* Stretcher Rod, which allows the operator to throw the upper arm out of the way when adjusting his work or saw. This joint also permits the machine to work much more freely than with a straight iron rod.

4. Our clamps have a *hinged jaw*, which overcomes the disagreeable raking overthrow of the blade, which is unavoidable when the saws are secured rigidly to the arms. Saw blades are not nearly so liable to break when clamps have this joint. Thus a *large per centage* of the *expense* of running the saw is saved. Besides this the saw runs *much easier*, the swing coming at the *hinge* instead of bending the blade with each stroke of the saw.

5. The Balance Wheel is 4¼ inches in diameter, with a handsome spoke center and *Rim* of *Solid Emery* (No. 70), ⅝ x ¼.

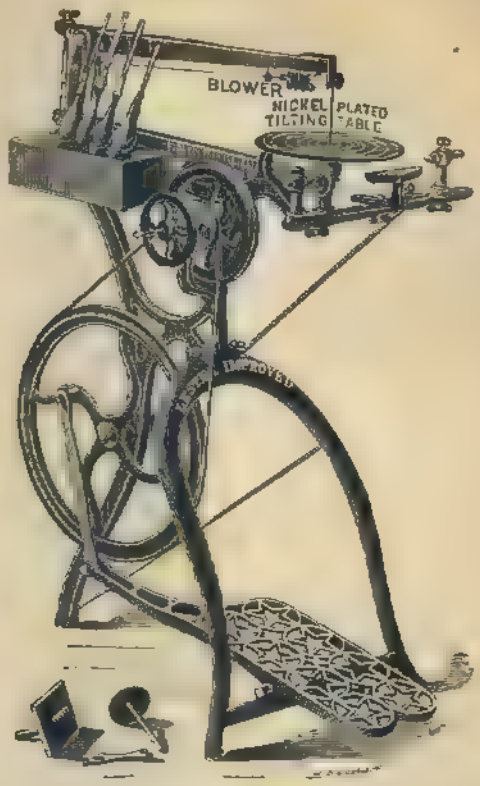
Our attachment for *Drilling* is on the *Right Hand* side of the machine, which, for convenience, is an obvious advantage.

Price, Complete $6 00

PRICE OF FANCY WOODS PER SQUARE FOOT

Thickness, Inch,	1/8	3/16	1/4
White Holly,	$0 20	0 20	0 25
Mahogany,	$0 20	0 20	0 25
Black Walnut,	$0 12	0 12	0 15

"Lester" Improved Saw.



This machine is adapted alike to the use of either AMATEURS or MECHANICS and will be found very convenient in PATTERN MAKING

The Lester Saw is made of iron and steel, except the Pitman and Arms, which are Ash. The *Iron Work* is nicely japanned black, with stripes of red and gilt. The *Wood Work* is varnished, bringing out the beautiful grain of the ash

The *Driving Wheel* is 15 inches in diameter, and weighs 13 lbs. The *Treadle* is made of *Iron* from a new and handsome pattern.

The *Scroll Sawing Attachment* is provided with a *Tilting Table* for inlaid work. The Arms swinging 18 inches in the clear. A Dust Blower which works automatically. A Roller inserted in the Table back of the saw, which makes it run perfectly true. The Clamps will hold the coarsest or finest Saw perfectly, while they are made adjustable to the right or left, or backward and forward, so that the blade may be kept in line. This Saw will cut lumber from 1/16 inch to 2 inches in thickness

The *Circular Saw Attachment* consists of a Saw 3 inches in diameter and an iron table, 3 x 4½ inches. This Saw will cut lumber up to ½ inch.

The machine is also furnished with a *Solid Emery Wheel* and *Drilling Attachment*, accompanied by 6 best Stubbs Steel Drills, of assorted sizes.

The *Lathe Attachment* is provided with iron ways and rests, steel centers, and 3 fine steel turning tools. Length of bed, 15 inches. Distance between centers, 9 inches. Swing, 3 inches. Length of slide rest, 4 inches.

The following parts are supplied with each machine, viz.: 6 Saw Blades, 1 Wrench, Screw Driver, 2 Sheets of Designs, and a nice box for the small tools.

When shipped it is taken apart and packed in a box, but can easily be set up by following the directions accompanying each machine.

Price, with Nickel-Plated Table and Saw Guide, $12 00.

Spring Punches.

REVOLVING TUBES.

4 Tubes . . . . . Per Dozen, $12 00
6 Tubes . . . . . " " 15 00

FAST TUBE.

Tubes, Assorted, 6 to 9 . . . . Per Dozen, $7 50

Saddlers' Punch Plyers.

No. 110. 6 Inch . . . . . Per Dozen, $6 25
No. 112. 6 Inch, 2 Extra Tubes . . . . . " " 9 00
No. 114. 6 Inch, 3 Extra Tubes . . . . . " " 18 00

Conductors' Punches.

No. 4310.

Nickel-Plated Per Dozen, $25 00

No. 43.

Fancy Holes Per Dozen, $13 50

Scandinavian Padlocks.

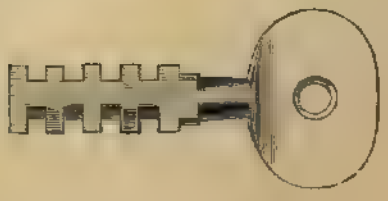
Malleable Iron.

No 110.

McWilliams Patent.

HAND MADE.

No. 150.



Numbers.	Tumblers.	Malleable Iron.	Per dozen.
104		2 Keys, Weight 2 lbs per Dozen	$ 8 20
106		2 " " 6 " " "	9 00
108		2 " " 10 " " "	11 00
110		2 " " 13 " " "	13 00
112		2 " " 19 " " "	19 50
114		2 " " 30 " " "	30 00
		Wrought Iron. Hand Made.	
150	8	2 Keys, Weight 13 lbs per Dozen	$15 00
152	10	2 " " 19 " " "	18 00
154	12	2 " " 28 " " "	22 50
156	14	2 " " 32 " " "	27 50
158	16	2 " " 52 " " "	35 00

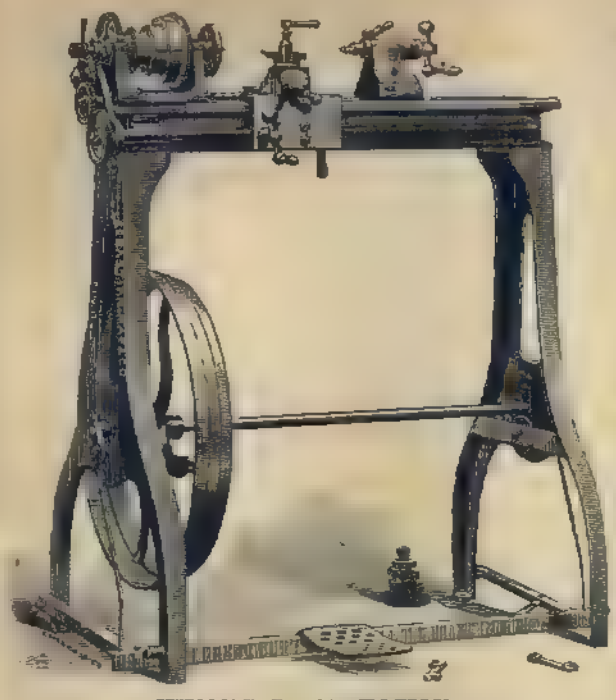
Wrought Iron Tumbler Padlocks.

No. 715. Old No. 8.

No. 719. Old No. 1039.

Numbers.	Size.	DESCRIPTION.	Per dozen.	
			1 Key.	2 Keys.
715	3 Inch.	1 Tumbler, 12 Changes, Brass Drop and Bushing, Side and Bridge Wards, Solid Brass Wheel	$9 20	$10 30
719	3 "	1 Tumbler, 12 Changes, Engraved Drop, Brass Bushing, Wheel, Side and Bridge Wards, Revolving Key Pin, Flat Steel Key	11 70	12 75

Light Screw-Cutting Lathe.



SWINGS 8 x 20 INCHES.

The cut represents a new Screw-Cutting Engine Lathe, which swings 8 inches over shears, 20 inches between centers, and weighs 250 pounds. It is made of iron from the floor up, and finished in the most complete and workmanlike manner

This Lathe is made from entirely new patterns, and is of the latest design and very best workmanship.

For Model-makers, Inventors, Electricians, Sewing Machine Agents, Amateurs, and others having use for a small Screw-Cutting Lathe, it is just the tool that is wanted, and is specially designed for their business and purposes

With this Lathe you can turn iron, steel, brass, bone, wood or ivory. Also polish, drill, do milling, screw-cutting, or any other kind of work that can be done on any larger lathe proportionately, and can do all the above satisfactorily, as it is designed for solid work, not being a mere toy or plaything.

The bed has four V's, is 6¼ inches wide, and is thoroughly braced.

The head-stock is a three-speed cone for one-inch belt. The back gear is thrown in and out by a cam. The head is detachable, so as to admit of re-adjustment should the spindle become untrue. All bearings are scraped. The tail stock sets over for turning tapers and is fastened down by a cam

By moving the head stock and driving wheel to the foot of the lathe large surfaces may be turned or polished. This is a great feature for pattern makers, and others

The carriage and rest is of the most approved and latest design. It is gibbed to the bed both front and back. It is detachable for hand work and can be thrown into feed instantly for turning or screw cutting. All thread for screws are bastard, that is, half square half V. The gears are cut from solid metal in the best machinery known for gear cutting, and are as true and noiseless as it is possible for metal gear to be.

The treadle is of wrought angle iron, the rod supporting the driving wheel runs on friction wheels; the driving wheel weighs about 60 pounds, is turned and polished, the Pitmans slip through a hole in the foot bar, so that if you get your foot under the treadle it will not be injured, nor will the treadle unhook. The top of the Pitmans are of gun metal, and the length of the stroke is adjustable

The foot motion is the easiest lightest, and stiffest one known, and runs the lathe almost without an effort. The head spindle is made of 1¼ inch solid steel and is run in gun metal boxes, provision being made to take up all wear and keep them true. The tail spindle is ⅝ of an inch in diameter

Either right or left hand threads may be cut with this lathe We furnish gears to cut from 3 to 40 threads, to the inch, as per index Other threads may be cut by using extra gears, which we can furnish to order

With this Lathe we furnish a face-plate, two pointed centers, wrenches and gears to cut all the threads, as per index.

Index for Lathe.

SCREW IS FIVE THREADS TO THE INCH

No. Threads	3	4	5	6	7	8	9	10	11	12
Spindle . .	40	40	40	40	40	40	40	40	20	20
Screws . .	48	64	40	48	56	64	72	80	44	48
Stud . . .	2to1	2to1	..	..	..	..	..	..	..	..

No. Threads	14	16	18	20	22	24	28	32	36	40
Spindle . .	20	20	20	20	20	20	20	20	20	20
Screws . .	56	64	72	80	44	48	56	64	72	80
Stud . . .	.	..	..	..	1to2	1to2	1to2	1to2	1to2	1to2

Rules for Gearing an Engine Lathe.

Divide the number of threads in a given length of the screw which is to be cut, by the number of threads in the same length of the leading screw of the lathe, and the quotient is the ratio that the wheel on the end of the screw must bear to that on the end of the lathe spindle.

Compound Gearing.

Multiply the gear on the spindle by the thread you wish to cut, then divide by the gear in contact with spindle gear, then multiply by the gear in contact with screw gear, then divide by the number of threads on the lathe screw, and the quotient will be the gear for the lathe screw

PRICE LIST AND DESCRIPTION

SWING	BETWEEN CENTERS	LENGTH OF BED	WEIGHT	PRICE
8 Inches.	20 Inches.	36 Inches.	250 Pounds	$65 00

THE FOLLOWING MADE TO ORDER.

LATHES TO SWING	BETWEEN CENTERS	LENGTH OF BED	WEIGHT	PRICE
8 Inches.	30 Inches.	46 Inches.	270 Pounds.	$75 00
8 "	36 "	52 "	280 "	80 00

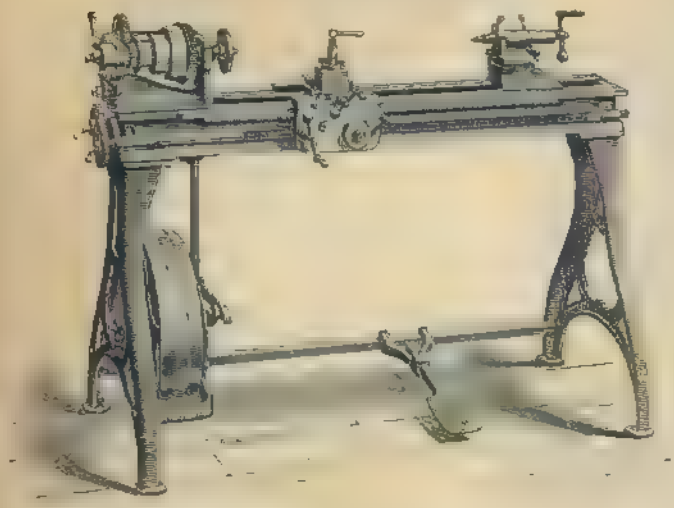
Countershaft.

For Above Lathe $9 00

Screw Cutting Lathe.

Foot Power Engine Lathe.

11 INCH SWING WITH PLAIN GIB REST.



DESCRIPTION OF LATHE, 4 FEET BED.

The Lathe occupies a floor space of 28 x 48 inches, the centers being 44 inches high from the floor; the bed is 48 inches long, 6½ inches wide, 5½ inches deep, with double Vs. for Carriage and Tail Stock. It swings 10 inches over bed and 6 inches over Carriage, and will turn 26 inches long.

The Head Stock is back geared, and the cone has three speeds for 1½ inch belt, the smaller being 3 inch diameter, the larger 6 inch diameter; thus, with the back gears, gives six different speeds, the fastest giving about 1,000 revolutions of the Arbor to 100 of the Balance Wheel, and the slowest 75 of the Arbor to 100 of the Balance Wheel; this gives a sufficient range for all kinds of work.

The Carriage has a rack and pinion for moving it by hand, and a split nut moved by a cam on the face of Carriage to throw it in gear with screw; the reversing motion is in Head Stock.

The Tool Post has a slot for tools ⅜ x 1⅛ inch; the tool is adjusted by a wedge made on the arc of a circle and fitted to a convex washer. The leading screw runs the whole length of Lathe, and has 10 threads to the inch. A set of gears go with the Lathe, which will cut all common threads and a great variety of other sizes, by compounding them. There is a screw stop on the Carriage for screw cutting, etc.

The Tail Stock can be set over for turning tapers, etc. The spindle of Tail Stock is 1 1/16 inch diameter, and has a motion of 3 inch. The center is fitted to a taper hole which is the method adopted by all the best makers, and is the same size as the one in Head Stock, so that chucks and other tools fitted to one can be used in the other.

The Foot Motion we consider the best made, the crank is adjustable and the shaft has swivel bearings, the Balance Wheel is 22 inch diameter, and has three speeds to match Cone on Head Stock: cuts Screws from 5 to 32 threads to the inch.

Hollow Steel Spindle in Head, receives Rods up to ½ inch in diameter.

Foot Power, Bed 4 Feet	$180 00
" " " 5 "	200 00
Overhead Pulleys for Same	12 50

The "Briggs" Lathe.

DESCRIPTION OF THE "BRIGGS" LATHE.

This Lathe will turn a piece of wood or metal 12 inches long and 6 inches in diameter. It can be used with equal advantage for Drilling, Polishing, Sawing, etc., etc. The length of bed is 24 inches; the spindle is made of steel, has a conical bearing, and can be tightened as it wears. The bed, head, tail stocks and cone pulley are of cast iron and the centers of steel. The following pieces are furnished with the Lathe: 2 T rests, 1 face-plate, 2 plain centers, 1 spur center for wood, 1 plain drill chuck, 1 drill pad and 1 center left blank to turn down as a fitting for a universal chuck. The bench weighs 81 pounds, is made of iron, with a black walnut top, and has a driving wheel measuring 22 inches in diameter, with three grooves for changes of speed.

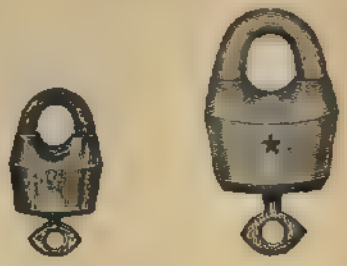
Lathe, 24 Inch Bed	$25 00
" 30 "	30 00

Dog Collar Padlocks.

SPRING.

One Dozen in a Box.

SCANDINAVIAN.



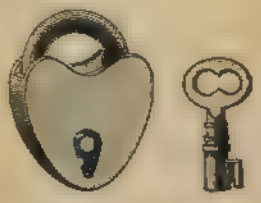
One Dozen in a Box

Numbers.	Size.	DESCRIPTION.	Per dozen.
20	⅝ Inch.	Brass	$1 00
21	¾ "	"	1 00
22	⅝ "	Nickel-Plated	1 40
23	¾ "	"	1 40

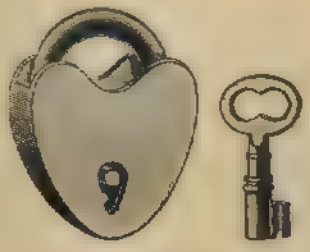
Number.	Size.	DESCRIPTION.	Per dozen.
301	⅝ Inch.	Gilt	$4 00
302	¾ "	"	6 50
303	⅝ "	Nickel-Plated	5 00
304	¾ "	"	8 00

Small Padlocks.

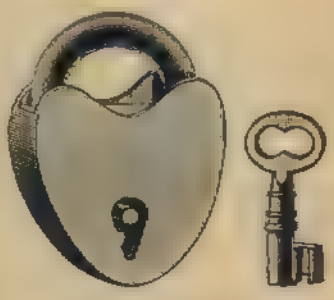
WITH KEYS.



No. 40, Brass.
No. 51, Nickel-Plated.



No. 41, Brass.
No. 52, Nickel-Plated



No 42, Brass.

Numbers.	Size.	Brass.	Per dozen
40	⅝ Inch.	American Pattern	$3 75
41	¾ "	" "	3 75
42	1 "	" "	4 20
43	1⅛ "	" "	4 60
44	1¼ "	" " With Closing Key Hole	5 00
45	1½ "	" " " " "	5 45
		Nickel-Plated.	
51	⅝ Inch.	American Pattern	$5 85
52	¾ "	" "	5 85

"STODDARD'S"

Patent Caliper and Dividers.

The best and most handy tool for a carpenter made, and no one who has once used them will go without them. As the cut shows it consists of a pair of heavy hinged divider legs swinging on a slide with spring attached, which by the two screws can be regulated to any width.

To these legs are fitted two sets of divider points, one pair 5½ and one 14 inches long. One of each pair of divider legs has a reversible point which unscrews and by being reversed a pencil can be placed in same, and used for drawing circles.

Also, there is a pair of caliper legs which fits the same stock, and as they will caliper 16 inches, are invaluable for turning pulleys, and in fact all large caliper work in a shop. With the long divider legs a 5 foot circle can be struck. These tools are made of brass and finely finished.

Nickel-Plated.

Per Set, Complete $4 50

SPRING DIVIDERS.

Length, to In.,	6	7	8
Per Dozen,	$5 50	6 50	7 50

FINE POLISHED CAST STEEL DIVIDERS.

Length, to Inch,	6	7	8	10	12	15	18	24
Per Dozen,	$5 50	6 50	7 50	10 00	12 00	18 00	25 00	36 00

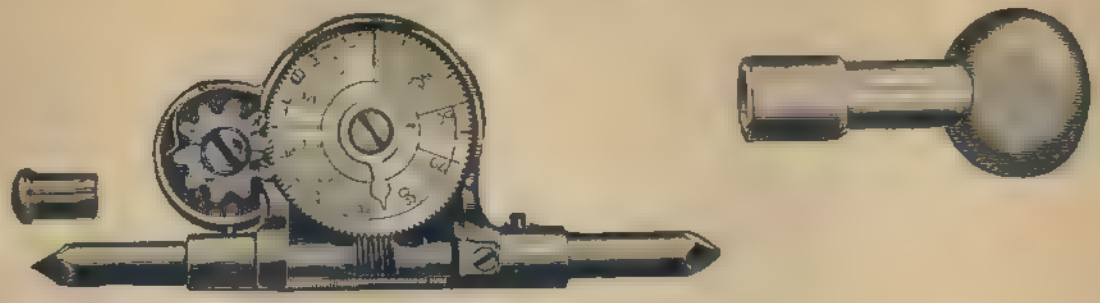
FINE POLISHED CAST STEEL COMPASSES.

Length, to Inch,	3	3½	4	4½	5	6
Per Dozen,	$4 25	4 35	4 50	4 60	4 80	5 50

Speed Indicators.

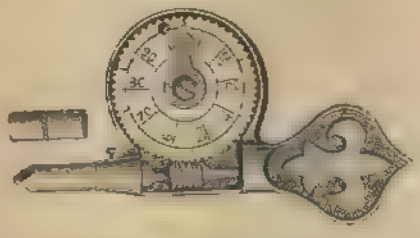
PATENTED IMPROVED DOUBLE SPEED INDICATOR.

EITHER RIGHT OR LEFT.



Indicates 1,000 Revolutions . . . . . Each, $2 00

POCKET SPEED INDICATOR.



Full Size

Pocket Speed Indicator.

Nickel-Plated. Indicates 100 Revolutions . . . . . Each, $1 00

"TABOR'S" REVOLUTION COUNTER.

With Stop Motion

"Tabor's" Revolution Counter.

The urgent need of a good, simple stop motion Revolution Counter that could be put upon the market at a price low enough to be within the reach of all mechanics, has led us to bring out this little instrument.

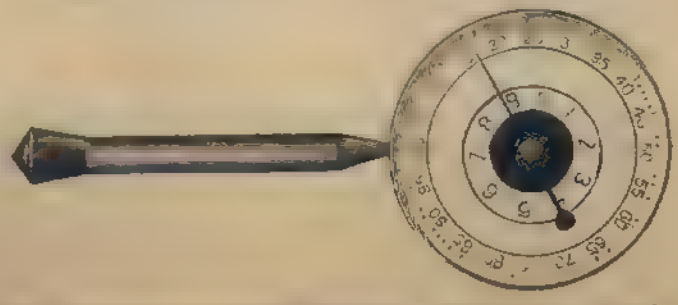
HOW TO READ THE DIALS

The upper dial is graduated from 0 to 100, and registers units; the lower dial is graduated from 0 to 50 and registers hundreds, making a continuous count of 5,000 possible.

The reading on the under dial is through the opening in the upper dial. The index finger in the center of the upper dial, for instance, if the point in the opening through the upper dial indicates 45 on the lower dial and the index finger points to 25 on the upper dial, the reading will be 4,525 revolutions.

Price . . . . . Each, $1 50

THE "LIGHTNING" SPEED INDICATOR.



It registers as high as 1,000,000 as shown by the cut, which is actual size. Can be held at any angle while using, very convenient for Dynamo Machines and the like. Has nickel plated dial and the face is covered with a watch crystal. Is fully warranted or money refunded.

Price . . . . . Each, $2 50

The Continental Lawn Mower.

The Lightest Running and Swiftest Cutting Mower in the Market.

PRICES.

High Grass Machines.

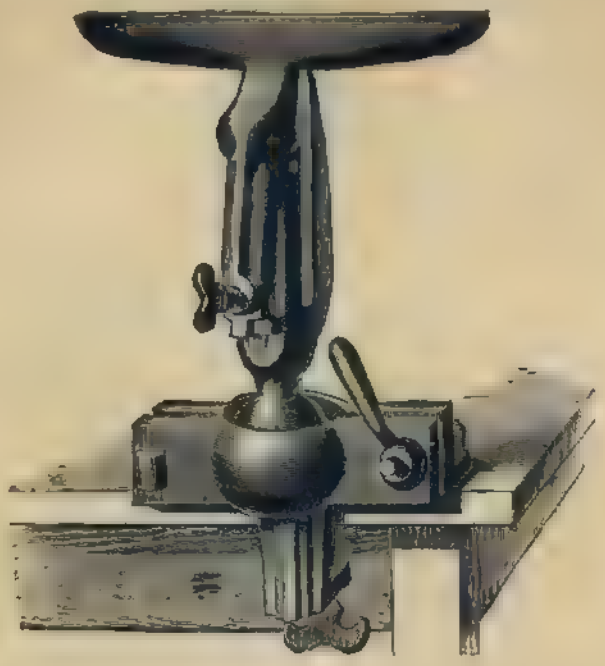
15 Inch,	Weighs 46 lbs	Each,	$22 00
17 "	" 48 "	"	24 00
19 "	" 50 "	"	27 00
21 "	" 52 "	"	30 00

Regular Pattern.

10 Inch,	Weighs 30 lbs	Each,	$13 00
12 "	" 32 "	"	15 00
14 "	" 35 "	"	17 00
16 "	" 37 "	"	19 00
18 "	" 38	"	21 00

Orders taken for Horse Lawn Mowers.

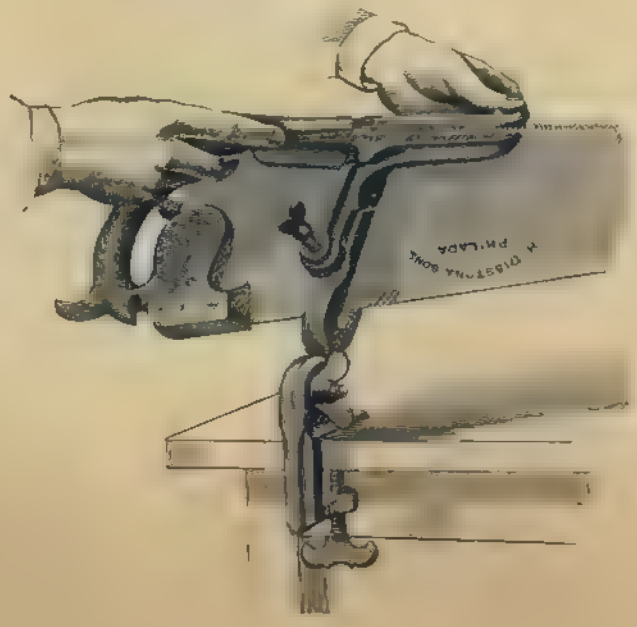
Adjustable Ball and Socket Saw-Clamp.



By the use of this Clamp, a Saw can be filed at any angle, or square, as the operator may desire.

No. 1. Ball and Socket . . . . . Per Dozen, $15 00

Adjustable Saw-Clamp.

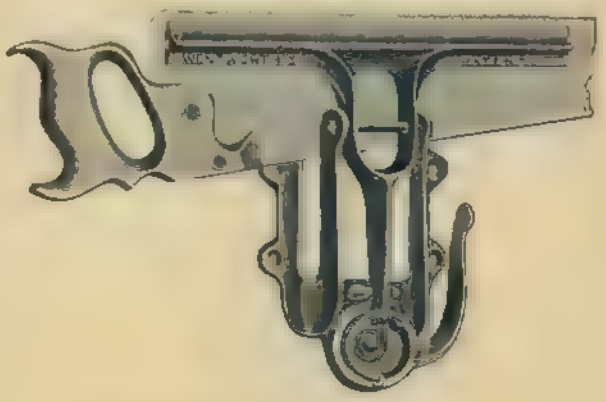


No. 2. Adjustable . Per Dozen, $12 00

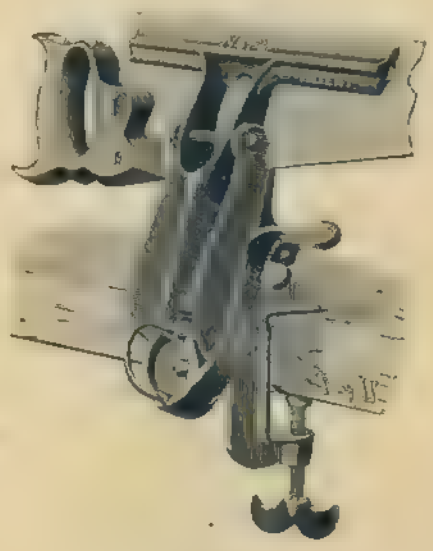
"Wentworth's" Patent Noiseless Saw Vises

WITH A

FLEXIBLE RUBBER CUSHION BETWEEN THE JAWS.



This Cut Represents Nos. 1 and 2 Vises.



No. 3

Guaranteed to Make no More Noise than Filing on a Solid Piece of Iron

The Jaws are Planed slightly Concave producing an equal bearing the entire length, and are made to open and close by simply turning the Cam Lever. Nos. 1 and 2 Vises can be easily screwed to a work bench or any place desired. No. 3 Vise has a Malleable Iron Screw Clamp for attaching it to a work bench and in turning a Thumb Nut it can be tilted to any desired angle Also can be easily detached and carried about from place to place.

PRICES.

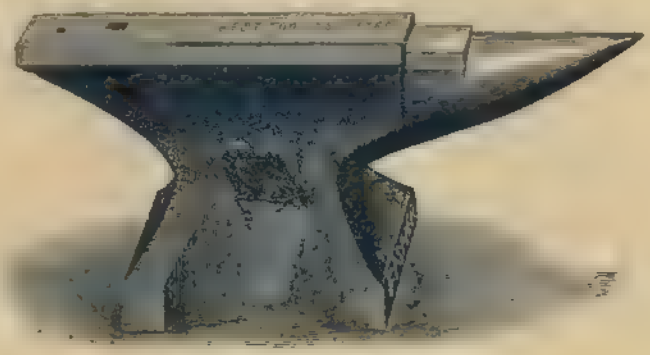
No **1.**	(11 Inch Jaws)	Per Dozen, $15 00
No **2.**	(15 Inch Jaws)	21 00
No. **3.**	(11 Inch Jaws)	18 00

"Wright's" Anvils.

85 to 250 Pounds are Base Sizes — Per Pound, $—

Over 250 Pounds Advance	Per Pound,	$0 01	50 to 59 Pounds Advance	Per Pound,	$0 03
70 to 84 " "	" "	0 01	40 to 49	" "	0 04
60 to 69 " "	" "	0 02	30 to 39	" "	0 05

"Eagle" Anvils.

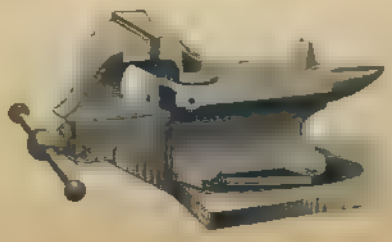


STEEL FACE

Nos.	0	1	2	3
Weight, Pounds,	10	15	20	30
Each,	$2 50	3 00	3 75	4 50

"Cheney's" Improved Combined Anvil and Vise.

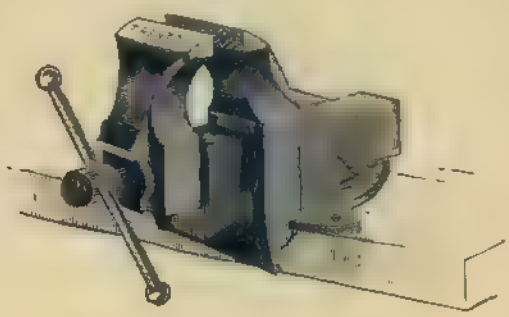
WITH ADJUSTABLE JAW



No. 10.	Face of Anvil 4½ x 2	Inch,	Jaws 2½	Inch Wide, and Opens 3	Inch						Each,	$3 50
No. 20.	" " " 6½ x 3	"	" 3⅜	"	"	"	"	4	"		"	4 50
No. 30.	" " " 8 x 3⅝	"	" 4	"	"	"	"	5	"		"	5 50
No. 40.	" " " 8½ x 4	"	" 4½					5			"	6 50

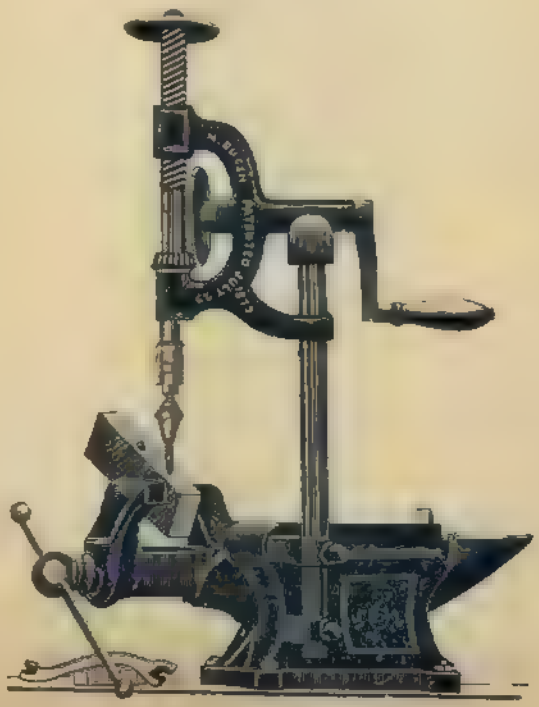
Bench Vises.

"TRENTON" PATENT IMPROVED PARALLEL.



Jaws, Inch,	2	2½	3	3½	4
Price,	$3 00	4 00	5 00	5 75	7 50

"MILLER'S" ANVIL, VISE AND DRILL.



The Anvil has a Steel Face 4 x 8 Inches. Vise Jaws, 3 1/2 Inches Wide and Steel Faced. Steel Drill Press with Adjustable Chuck to hold 1/4 Inch Drills and all Smaller Sizes. Weight of Anvil, Vise and Drill, 80 lbs.

Price $20 00

Hallway Letter Boxes.

DUNH... & CO. SAN FRANCISCO

These Boxes are intended for use in Hallways of Office Buildings, Apartment Houses, etc., and are coming into very general use in cities where the carrier system has been adopted.

The Box is very strong, being made of iron, cast in one piece. Security is guaranteed also by the use of a Yale Lock with Corrugated Key. The flap at top can be raised, and through the opening thus exposed letters may be dropped into the Box. The grating at bottom enables any one to see at a glance, without opening his box, whether it contains any mail or not. The attachment of the Box to the wall is very simple, secure and easy.

Iron. Japanned Finish.

No. **2.** Size, 3 In. Deep, 7 In. Wide, 11 In. High, with 3 Keys . . . . . Each, $3 00

No. **3.** " 2 " " 5 " " 8 " " " 3 " . . . . . " 2 50

Letter Box Plates.

Three-quarter Size Cut. Patented.

Berlin Bronzed.

No. **26.** Packed with Screws . . . . . Per Dozen, $4 20

Three-quarter Size Cut. Patented.

Berlin Bronzed.

No. **46.** Packed with Berlin Bronzed Machine Screws . . . . . Per Dozen, $5 50

One-sixth Dozen in a Box.

DUNHAM, CARRIGAN & CO.

House Bells.

Rough.

Assorted from 2 to 4 Inch . . . . . Per lb, $0 45

Polished.

Assorted from 2 to 4 Inch . . . . . Per lb, $0 51

Horse Car Bells.

Pure Bell Metal. Rough.

3 Inch Mouth . . . . . Per lb, $0 72

3½ " " . . . . . " " 0 72

DUNHAM CARRIGAN & HAYDEN CO. SAN FRANCISCO

Fine Polish, Extra Heavy. Half Size Cut of No. 6.

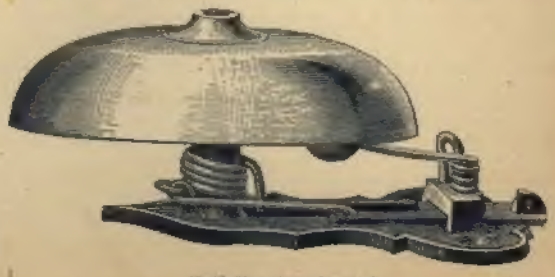
Hand Bells.

Fine Polish.

Nos.	0	1	2	3	4	5	6	
Diam. of Mouth,	2⅛	2½	2⅝	3	3½	3¾	4	Inch.
Per Dozen,	$2 25	2 62	3 50	4 50	6 50	8 50	11 25	

Nos.	7	8	9	10	12	14	16	
Diam. of Mouth,	4¼	5¼	5½	6	6½	6¾	8	Inch.
Per Dozen,	$13 75	18 50	24 00	30 00	36 00	48 00	54 00	

"Abbe's" Patent Gong Bells.



Half Size Cut of 5 Inch.

No. 20. Bronzed Steel.

Inch,	3	4
Per Dozen,	$4 00	5 00

No. 30. Polished Bell Metal.

Inch,	3	4	5	6	7	8
Per Dozen,	$8 00	10 00	14 00	20 00	28 00	40 00

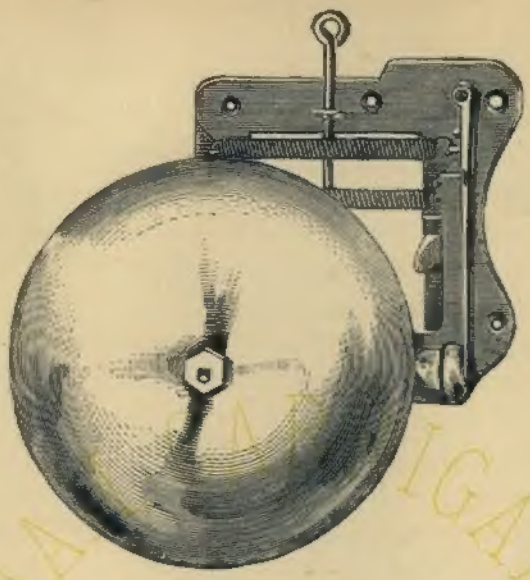
"Yankee" Alarm Door Bells.

4 Inch.

No. **125.** Bronzed Steel Bell . . . . Per Dozen, $ 5 00

No. **135.** Polished Bell Metal Bell . . . " " 10 00

Steamboat and Locomotive Gongs.



Trip Gongs.

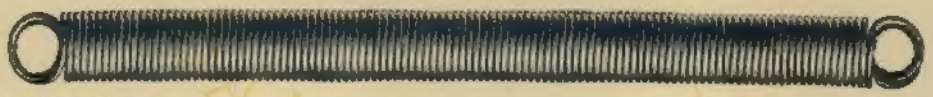
Size, Inch,	3	4	5
Each,	$2 25	2 75	3 25

Locomotive Gongs.

Size, Inch,	6	7	8	10	12	15	18
Each,	$4 30	5 75	6 75	9 00	15 00	21 00	36 00

Slow Bells made to order, of any Pattern.

Spring Brass Check Springs.



Size, Inch,	¾x6½	½x8	⅝x9½	¾x10½	⅞x11½	1x13
Each,	$0 30	0 35	0 50	0 65	0 85	0 95

Gong Pulls or Bell Slides.

SMALL.	MEDIUM.	LARGE.
For one Finger.	For two Fingers.	For three Fingers.
Each, $0 75	Each, $1 25	Each, $2 00

Bell Cranks or Angles.

SIDE OR HORIZONTAL.

END OR UPRIGHT.

Brass Cranks, Mounted on Iron.

TO BE PUT ON WITH SCREWS.

Small Radius, 2	Inch	Each, $0 50
Large " 2½	"	" 0 75